

TO VIRE BOOKES OF
 Husbandry, collected by M. Conradus Heresbachius, Counsellor to the hygh
 and mightie Prince, the Duke of Cleue; Conteyning
 the whole arte and trade of Husbandry, with the
 antiquitie, and commendation thereof. A Remedy against y^e
 Newly Englished, and increased, Barrennes of Trees 99
 by Barnabe Googe, To make an elme frond, 102,
 Esquire. Samara the seeds to be grafted in
 (*). Maure Birche Tree 18
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Agumb cast a kind of willow w^{ch} is alwaies greene,
 GENESIS. 3. 19. Cilindrus a Root -

In the sweate of thy face shalt thou eate thy bread, Scutula a round
 tyll thou be turned agayne into the ground, for poene of barkes cut
 out of it wast thou taken: yea, dust thou art, and out in grafting,
 to dust shalt thou returne. emplastratio.

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plome trees 90.

ordering of woodes, 100.

AT LONDON,

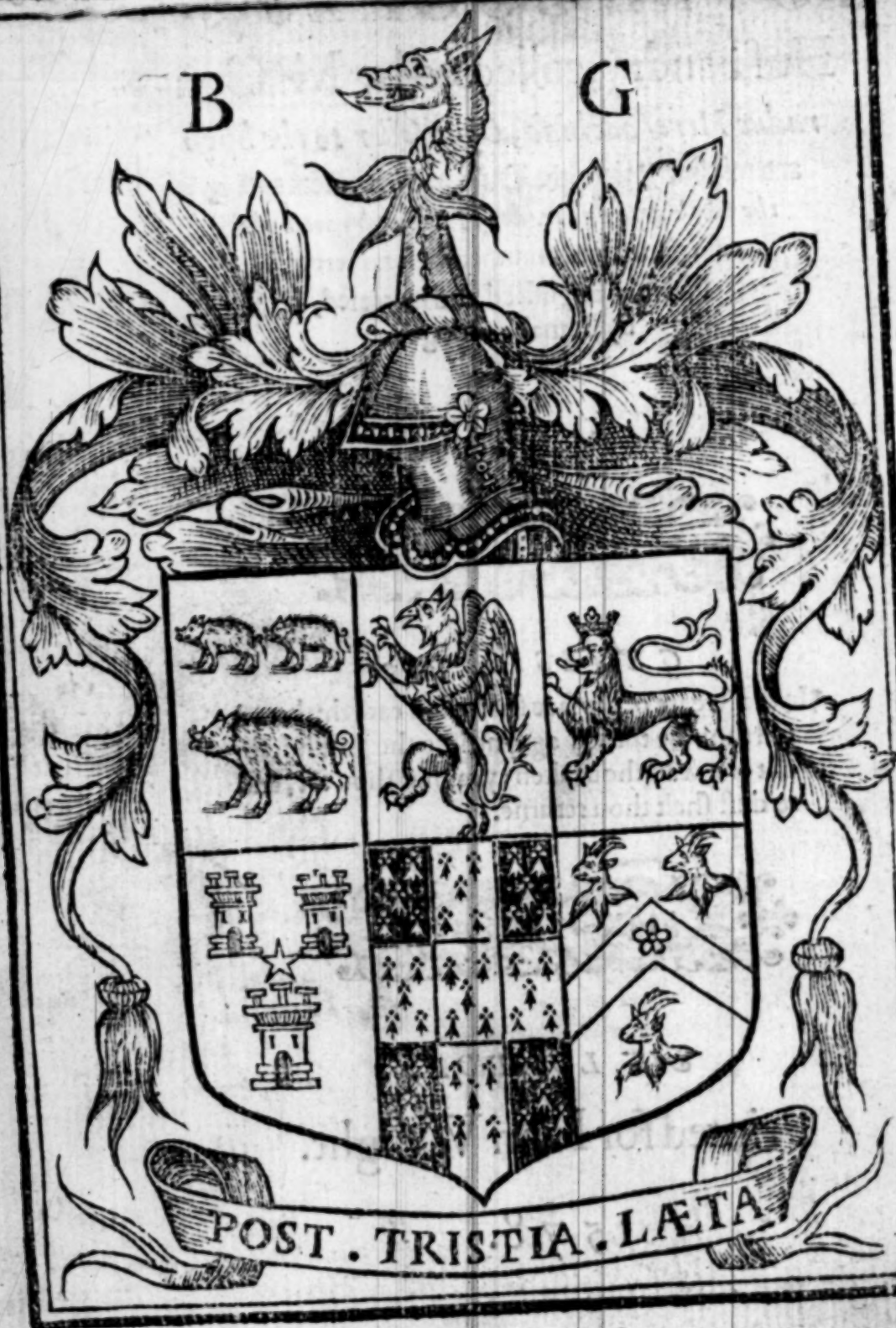
Printed for Iohn VVight.

1578.

Le agriculture & maison rustique de Maistres Charles
 Estienne, & Jean Liebault Docteurs en Medecine, 1576
 m^r Reader woode myll of Abington. G^r hyspals 6 milles
 in Tarys of hales over Rytter.

B

G



shipfull, his very good freend,

Syr VVylliam Fitz VVylliams,

Knight.



If such as haue
painfully and faith-
fullye of long tyme
serued their Prince
and Countreie a-
broade, doo most of
all others deserue,
beside their condi-
gne rewarde, the
benefite of a quiet
and contented life
at home, I knowe no
man (good Sir Wil-
liam Fitzwilliams)

that of right may better challenge it, then your selfe: who for the
long tyme of your painefull seruise, the trustie discharging of the
treasureship of Ireland, and your worthy gouernment (whyle it
pleased her most excellent Maiestie to appoynt you for the sayd
Realme her highnesses Deputie) haue so behaued your selfe, as
euen your very enimies (wherof I know you had good store) haue
been forced to geue you, will they nill they, your inst deserued com-
mendation. I leaue to remember your sundry and troublesome
trauayles, your Gentlemanly mynde, alwayes unweeriend and un-
mated with what so euer perill or hazard happened: I passe ouer
(because I knowe you delight not in hearyng your prayes) that
honourable, and worthy for euer to be Chronicled, charge geuen
vpon the Oneale at Monham, in the rescue of your miserably
distressed and slughtred companions, and countreymen, of which
there be sundry yet remayning, that will attribute the hauyng of
(y) their

The Preface.

their liues (next vnto God) to the prosperous successe of your valeaunt enterprife: Neither hath this your loyall seruice to your Prince and Countrey at any tyme been vnaccompanied, without a feruent and zealous affection towards the Almighty, the cheefest and onely beauty of all mans actions. Since thus (as I sayde) you may iustly challenge for the good seruice you haue done in your youth, a place and tyme of rest and quietnesse in your greater yeeres, and that there is, in my fancie, no life so quiet, so acceptable to God, and pleasant to an honest minde, as is the life of the Countrey, where a man, withdrawing hym selfe from the miseries, vanities, and vexations of this foolish and nowe too much dotyng world, may geue hym selfe to the sweete contemplation of God, and his workes, and the profite and reliefe of his poore distressed neighbour, to whiche two things we were chiefly created. I thought it good to send you here (as a token and testimonie of my thankfull minde, for your sundry frendshippes and curtesies shewed vnto me) a rude draught of the order and maner of the saide Countrey lyfe, whiche you may vse (if it please you) for your recreation: and afterwards (if so you thinke it meete) publish vnder your protection, so the commoditie and benefite of others.

Fare you well in great haste from
Kingstone, the fyrst of
Februarie.

1577.

Your assured louing freend,
Barnabe Googe.

the Reader.



HAVE thought it meete (good Reader) for thy further profite and pleasure, to put into English, these foure bookes of husbandry, collected and set forth, by M. CONRAD HERESBACH, a great and a learned Councellour of the DUKE of Cleues: not thinking it reason, though I haue altered and increased his woorke with myne owne readings and obseruations, ioyned with the experience of sundry my frendes, to take from hym (as diuers in the like case haue done) the honour and glory of his owne traualle: Neyther is it my minde, that this eyther his dooynges, or myne, should deface, or any wayes darken the good enterpryse, or painefull traualles of suche our Countreymen of England, as haue plentifully written of this matter: but alwayes haue, and doo geue them the reuerence and honour due to so vertuous and wel disposed Gentlemen, namely, Master Fitzherbert, and Master Tusser, whose woorke may, in my fancie, without any presumption, compare with any their Varro, Columella, or Palladius of Rome. You haue here set downe before you, not onely the rules and practises of the olde auncient husbantes, as well Greckes as Latines, whose very orders (for the most part) at this day we obserue, and from whom (yf we will confesse the trueth) we haue borrowed the best knowledge and skill, that our skilfullest husbantes haue: but also haue ioyned herewithall, the experience and husbandry of our owne husbantes of England, as farre as eyther myne owne obseruations, or the experience of sundry my frendes would suffer mee. And though I haue dealt with many, both Graines, Plantes, and Trees, that are yet strangers and vnknownen vnto vs, I doo no whit doubt, but that with good diligence and husbandry, they may in short tyme so be denisend and made acquainted with our soyle, as they wyll

prosper as well as the olde inhabitantes. It is not many ages agoe, since both the Peache, the Pistace, the Pine, the Cypressse, the Walnut, the Almond, the Chery, the Figge, the Abricock, the Muske Rose, and a great sort of others, both Trees and Plantes, being some Perseans, some Scythians, some Armenians, some Italians, and some Frenche, all strangers and aleantes, were brought in as nouelties amongst vs, that doo now most of them as well, yea and some of them better, beyng planted amongst vs in England, then if they were at home. I haue also been carefull about the plantyng and ordering of the Vine, though some of my frendes would haue had it omitted, as altogether impertinent to our countrey: because I am fully perswaded (yf diligence, and good husbandry might be vsed) we might haue a reasonable good Wine growyng in many places of this Realme: as vndoubtedly wee had immediatly after the Conquest, tyll partly by slouthfulnesse, not liking any thing long that is painefull, partly by Ciuill discord long continuing, it was left, and so with tyme lost, as appeareth by a number of places in this Realme, that keepe still the names of Vineyardes: and vppon many Cliffes and hilles, are yet to be seene the rootes and olde remaynes of Vines. There is besides Nottingham, an auncient house called Chilwel, in which house remayneth yet as an auncient monument in a great wyndowe of Glasse, the whole order of planting, proynyng, stamping, and pressing of vines. Beside, there is yet also growing an old Vine, that yeeldes a Grape sufficient to make a right good wine, as was lately proued by a Gentlewoman in the said house. There hath moreouer good experience of late yeeres been made, by two noble and honorable Barrons of this Realme, the Lorde Cobham, & the Lord Wylliams of Tame, who both had growyng about their houses as good wines, as are in many places of Fraunce. And if they answered not in all pointes euey mans expectatiō, the fault is rather to be imputed to the mallice and disdaine peraduenture of the Frenchmen that kept them, then to any yll disposition, or fault of the soyle. For where haue you in any place better, or pleasanter wines, then about Backrach, Colin, Andernach, and diuers other places of Germany, that haue

haue in a manner the selfe same latitude and disposition of the Heauē that we haue? Beside, that the nearenesse to the South, is not altogether the causer of good wines, appeareth in that you haue about Orleans, great store of good and excellent wine: whereas, if you goe to Burges, two dayes iourney farther to the South, you shall finde a wine not woorth the drinking. The like is (as I haue heard reported by Maister D. Dale, Embassadour for her Maiestie in these partes) of Paris, and Barle-
duke, the Towne being Southward, with noughty wines: the other, a great wayes farther to the North, with as good wines as may be. But admitte England would yeelde none so strong and pleasant wines as are desired (as I am fully perswaded it would) yet is it woorth the tryall and the trauayle to haue wines of our owne, though they be the smaller: and therefore I thought it not meete to leaue out of my booke the ordryng & trimming of vines. It remayneth now (good Reader) that thou take in good part my trauayle and good wyll, whiche were cheefely employed to the pleasuring and benefityng of thee, and not to quarell with mee, as is the maner of the most sort, for euery fault and ouersight that hath escaped my handes, nor to looke for any curious, or well measured stile, wherewith I am not able to satisfie thee, and though I were, yet were it neither for the matter nor method necessarie. And therefore I trust thou wilt accept it as it is, specially considering, that I neither had leysure, nor quietnesse at the dooing of it, neither after the dooyng had euer any tyme to ouerlook it, but was driuen to deliuer it to the Printer, as I first wrote it: neither was I priue to the printing, till suche tyme as it was finished. And therefore (though there be faultes, and great faultes in it) I am not to be charged with them, that if tyme, or oportunitie had serued, would not haue suffered them.

(.)

Farewell.

bandes, whose aucthorities, and obseruations,
are vsed in this Booke.

*The Byble, and Doctors
of the Church.*

Homer.	Oppian.
Hesiodus.	Constantyne.
Theocritus.	Cassianus.
Solon.	Didymus.
Xenophon.	Florentine.
Plato.	Anatolius.
Aristotle.	Sottron
Theophrastus.	Democritus.
Isocrates.	Appuleus.
Plutarche.	Heliodoxus.
Ælianus.	Platina
Diodorus Siculus.	Alexander Neap.
Herodotus.	Petrus de Crest.
Thucydides.	Budzus.
Polibius.	Ruellius.
Cato.	Fuccius.
Varro.	Mathiolus.
Virgil.	Cardanus.
Ouid.	Tragus.
Horace.	
Martial.	S. Nich. Malbee.
Columella.	M. Cap. Byngham.
Celsus.	M. Iohn Somer.
Hippocrates.	M. Nicaf. Yetzwert.
Galen.	M. Fitzherbert.
Ægineta.	M. Wylli. Lambert.
Dioscorides.	M. Tuffer.
Nicander.	M. Tho. Whetenhall.
Aristophanes.	M. Ri. Deesyng.
Alexander Aphrod.	M. Hen. Brockhull.
Macer.	M. Franklyn.
Vitruuius.	H. Kyng.
Dio.	Richard Andrewes.
Vegetius.	Henry Denys.
Iulius Firmicus.	William Pratte.
Both the Plinies.	Iohn Hache.
Athenæus.	Phillip Partridge.
Iulius Pollux.	Kenworth Datforth.
Lucian.	

TABLE OF ALL suche principall matters and woordes

as are contayned in this Booke, vvherein

the first side of the leafe is signified by A. and the
second by B. and whereas the Booke is in
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shewed by this marke * be-
fore the number.

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FINIS.

I

The first Booke of husbandry, en-
treatyng of carable ground, tyll-
lage, and pasture.

Cono. Rigo. Metella. Hermes.



WE thinketh I heare a neighing and tram-
pling of Horses without, go *HERMES*,
goe know what strangers there are.

HERMES, Sir, if my sight faile mee
not, it is *RIGO*, the principall Secretarie.

METELLA, A goodly matter,
scarce haue you been twoo dayes at home,

and now you must bee sent for agayne to the Court, perhaps to
be sent abroad in some embassage.

CONO. God forbid, iudge the best, it may be he comes to
see mee of curtesie and frendship.

RIGO. Ah maister *CONO*, I am glad I haue founde
you in the middes of your countrey ioyes and pleasures: Sure-
ly you are a happy man, that shifting your selfe from the trou-
bles and turmoyles of the Court, can picke out so quiet a life,
and geuyng ouer all, can secretlie lye hid in the pleasant Coun-
treyp, suffering vs in the meane tyme to be tost and toyne with
the cares and businesse of the common weale.

CONO. Surely I must confesse I haue taken a happy
way, if these goddesses of the Earth would suffer mee to enioye
such happinesse, that haue bequeathed the troublesome and am-
bitious life of the Court to the bottome of the Sea. But what?
doo you intend to bring mee againe to my olde troubles, beeing
thus happily discharged?

RIGO. Nothing lesse, though I would bee very glad you
should not so hastily forsake the Court, nor ridde your selfe from
the affaires of the common wealch. You know we are not borne
to liue to our selues, nor at our owne pleasures: but for our coun-
treyp, our common weale and state wherto we are called. There
can not bee a woorse thing, then for a man to suffer his countrey
forsaken, to come into the hands of villanous persons, and to re-

A. s.

ioyce

The first booke entreatyng

ioyce with him selfe, that being out of Gunshot, he hath left the hurlie burlie of gouernment. And though *Cato* had no neede of Rome, yet Rome and *Cato* his freendes had neede of hym.

CONO. I graunt you, as long as peeres and strength will beare it, wee are bound to serue in our vocation: but as you your selfe are dynen to confesse, there is sometime a reasonable cause of geuiing ouer. *Lucullus* is highly commended, that whyle his body was strong and lusty, he applied him selfe wholly to the seruice of his Countrey, and that after his honourable seruice both abroad and at home, in the ende he got him selfe quietlie agayne to his booke. And *Scipio*, who after hee had conquered both *Carthage* and *Numidia*, was content rather to leaue of and rest him selfe, then to doo as *Marinus* did, who after so many woorthy victories and atchiued honours, could not content him selfe when he was well, but puffed vp with vaineasurabable desire of glorie and gouernment, would in his old age contend with young men, whereby he brought him selfe at the length to most miserable miserie. Surely *Cicero* tooke a better way by much, wher after the overthrowe of *Catelinus* conspiracie, he rather contented him selfe to liue quietly at home, then by ambitious intermedlyng with the contentions of the common wealch, to bring him selfe in danger of his lyfe. The desire of bearing rule in a common weale, is to be moderated with a certaine bounded modesty, specially in this age of ours, when Courtes are subiect to such enuies, hatreds, flatteries, slaunders, couetous and ambitious desires, & where no place is left for vertuousnesse and chistian simplicitie. These are the things that droue *Socrates* and *Plato* from their common weales, and doo like wise keepe mee, being now of good peeres and sickely, & Court forsaken, in this my poore cottage at home.

RIGO. Yea, but age is no sufficient excuse for you to leaue the gouernyng of your countrey. You know $\epsilon\gamma\alpha\ \nu\epsilon\omega\ \epsilon\sigma\lambda\alpha\iota\ \gamma\epsilon\gamma\epsilon\upsilon\tau\omega\upsilon$, the labour of young men, and the counsell of olde men, and how those common weales are safely alwaies guided, where olde mens heads, and young mens armes are stirring, Father *Nestor* got greate commendation for his counsell at the siege of *Troy*, where as *Peleus* and *Laertes* were despised, and accompanied for benchwhistlers at home.

CONO.

Lucullus.

Scipio.

Cicero.

Nestor.

ΕΚΚΛΗΝΤΕΣ.

CONO. Some are tickled with glozy: some with gaine, gifts,
& rewards, retaine the Cockcrowen Courtiers, yea such as haue
one of their feete already in y^e graue. We if we would content our
selues with this life, & geue our selues to the true & perfect lyfe,

In Princes Courtes we should not gape nor gase,

Nor yll successe in futes should vex our mynde:

No vayne nor fond deuise our eyes should dase,

Nor lewde affection should our fancie blynde.

All such thinges should be left and layde asyde,

Nowe tynes alas each out of order quite:

And to our shame the tyme away dooth flyde,

All seeke to lyue, but none to liue vpryght.

As the Poet excellently wel writeth in his Epigram, it were the
part of a mad man or a cockcome to runne headlong without any
profite into danger, when as hee may liue godly and quietly at
home without all trouble, as our old fathers were woont to doo.

R I G O. It is very true, the Poete accompteth hym blessed
to whom this life can happen: But in the meane tyme you are
alone, and leade your life with beastes, lowtes of the Countrey,
and trees, that haue spent all your tyme before among wise and
honourable personages. *Socrates* affirmeth wisdom to bee
learned in Cities, and not among beastes and trees.

Socrates.

CONO. *Socrates* his iudgement, though I will not gainsay,
yet it appeareth by his disputations with *Iscomachus* in *Xeno-
phon*, that he did not disalowe the Countrey mans lyfe. And as
for my liuyng alone, it almost happeneth here to mee, as *Cicero*
reporteth *Scipio* to say, that he was neuer lesse alone, then when
he was alone: for being alone, I haue continuall conference with
the grauest and wisest men. For either I apply my self wholly to
the sacred oracles of the Prophetes and the Apostles, who teach
the true wysedome, by whiche both Kinges rule, and Princes
gouerne, and by which our soules (whiche we cheefely ought to
regard) are fedde, whiche also shewe vnto vs the perfect way to
that euerlasting Court aboue, or when I list, I haue the compa-
ny of the greatest Princes and Monarchies of the worlde, with
whom I conferre of the doubtfull state and gouernment of com-
mon weales, in readyng the Histories and Chronicles of the

The vse of a
solitarie life.

A.ij.

worlde,

The first booke entreating

world, traauayling as it were throughout all nations, or reading the woorkes of such as write in busbandrie, I occupie my mind in the beholding the woonderfull woorkemanship of G D D in Trees, Plantes, and Beastes, whereby in the Creature, I acknowledge the Creator. And besides these dumbe companions, my freendes come sometime to see mee, sometime Gentlemen, sometime Noblemen, sometime the Prince hym selfe vouchsafeth to visite mee: so that there is scarcely any day but that some come vnto me, some for their pleasure, some for good will, and some for their businesse: For to my freendes and my neighbours, I neither denie my counsell, nor my trauayle. Therfore is it very expedient that good choyse be made of Lawiers, and discrete men for the Countrey, alwayes provided, they geue their counsell free and without wages. Many tymes beside, you from the Court send mee hyther processe and arbitramentes to be tryed before mee. Thus haue I in the Countrey sweeter and pleasanter company then you haue, either in the Court or Citie.

RIGO. Tell mee then I beseeche you, howe you bestowe your time, and howe you are occupied all the day: for I doubt not but you doo as muche as in you lyeth to spende the tynie as profitably as you may.

CONO. I will tell you througely, and not dissemble with you, if ye will geue mee the hearing, and to begin, I will vse the woordes and verses of the foresaide Poete, though in other his writings scarce honest, yet in this speaking very graue & wyse.

First serued on knees the Maestie diuine,

My Seruautes next and ground I ouerlooke:

To euery man his taske I doo assigne,

When this is doone I get mee to my booke.

I vse commonly to ryle first of all mee selfe, specially in Sommer, when we loose the healthfullest & sweetest tyme with sluggishnesse. *Aristotle* accompteth early ryling to be best both for health, wealth, and studie. In the Winter if I be loth to ryle, if either by vnseasonableness of the weather, or sicknesse cause mee to keepe my bed, I commit all to my Steward, whose faith and diligence I am sure of, whom I haue so well instructed, that I may safely make hyu my Deputie, I haue also *Enricha* my maide,

maide, so skilfull in huswiferie, that she may well be my wiues
 suffragan, these twayne we appoynt to supplie our places: but if
 the weather and time serue, I play the woorkemaister mee self.
 And though I haue a Bailife as skilfull as may be, yet remem-
 bryng the olde saying, that the best dought for the seelde is the
 maisters foote, and the best prouender for the horse the maisters
 eye, I play the ouerseer mee selfe. That it is hollsome to rise be-
 times, I am perswaded both by the counsell of the moste graue
 Philosophers, and besides by mine owne experience. When my
 Seruantes are all set to woork, and euery man as busie as
 may bee, I get me into my Closet to serue GOD, and to reade
 the holy Scriptures: (for this order I alwaies keepe, to appoint
 mee selfe euery day my taske, in reading some part either of the
 old Testament or of the newe): that doone, I write or reade such
 thinges as I thinke most needefull, or dispatch what businesse
 so euer I haue in my house, or with Sutaris abroad. A litle be-
 fore dinner I walke abroad, if it bee faire, either in my Garden,
 or in the feedes, if it be foule, in my Galerie: when I come in,
 I finde an Egge, a Chick, a peece of Kid, or a peece of Cleale,
 Filhe, Butter, and suche like, as my Foldes, my Parde, or my
 Dayrie and Fishpoules will yeelde, sometime a Sallet, or such
 fruites as the Garden or Orchard dooth beare: whiche victuals
without any charges my wife prouideth mee, wherewith I con-
 tent mee selfe as well, as if I had the dayntiest dishe in Europe.
 I neuer lightly sit aboue one houre at my meate: after dinner I
 passe the time with talking with my wyfe, my seruantes, or if I
 haue any, with my ghestes: I rise and walke about my ground,
 where I viewe my woorkiten, my pastures, my medowes, my
 coyne, and my cattel. When I am in the Countrey, I goe euery
 day, if the weather be good, and no other great businesse, about
 my ground: if not euery day, at the least once in two or three
 dayes: as often as I come to the Citie from the Countrey, I
 doo the like, to vnderstand how my ground is husbanded, and
 what is doone, what vndoone: neither doo I euer goe about it,
 but some good cometh of my trauayle. In the meane whyle I
 beholde the woonderful wisdom of Nature, and the incompre-
 hensible woorking of the most mightie God in his Creatures,

The best
 dought for
 ground is the
 maisters
 foote.

The first booke entreatyng

Academ.
questio. lib. 1.

Psalm. 140.

whiche as *Cicero* truly affirmeth, is the delicatest foode of the Soule, and the thing that maketh vs come neereſt vnto God. Here wape I with mee ſelfe, the benefices and woonderfull woorkes of God, who bringeth forth Graſſe for the cattell, and greene Herbes for the vſe of man, that he may bring foode out of the Earth according to the *Psalmie*. Here preacheth to mee.

*The fruitefull Earth that tyld in ſundry wyſe,
Vnto the eye her goodly fruites dooth yeelde:
The Violettes ſweete that eache where thicke doo ryſe,
And ſtayne with purple dye the pleaſant feelde,
Theſe feelde with hearbes, the hearbes with branches brane,
The glittring flowres that ſhine like ſtarres of light,
And ſpringing faſt diſcloſe the grace they haue.
Eache hearbe with ſundry flowre moſt ſweete in ſight.*

What woorkeman is there in the world, that is able to frame or counterſeyte ſuche heauenly woorkes? Who could of a ſclender graſſe make Wheate or Bread, and of a tender twigge bring forth ſo noble a licour as Wine? but onely that mighty Lorde that hath created all thinges viſible and inuiſible. With theſe ſightes doo I recreate my minde, and geue thanks vnto God, the Creator and conſeruer of all thinges, for his great and exceeding goodneſſe, I ſing the ſong, to thee O Lord belongeth prayſes in Zion, or, praiſe thou the Lorde O my ſoule. &c. beſeechyng GOD to bleſſe the giſtes that he hath geuen vs through his bounteous liberalitie, to enriche the feeldes, and to proſper the Corne and the Graſſe, and that hee will crowne the peere with his plenteouſnes, that wee may enioy the fruites of the Earth with thankſgeuyng, to the honour of hym, that the proſite of our neighbour. Then returning home, I go to wryting or readyng, or ſuche other buſineſſe as I haue: but with ſtudy, or inattention, I neuer meddle, in thre houres after I haue dined. I ſuppe with a ſmall pittans, and after ſupper I either ſeeldome or neuer wryte or reade, but rather paſſe the tyme in ſleepng my Sheepe come home from the feelde, and my Oxen draggyn home the plowe with weerie neckes, in beholding the pleaſant Paſtures ſweetely ſmellyng about my houſe, or my heardeſ of cattell lowing hard by me: ſometime I liſt to reſt me vnder an
olde

olde Holme, sometime vpon the grene grasse, in the meane tyme passeth by mee the pleasaunt Riuer, the streames falling from the springes with a comfortable noyse, or els walkyng by the Riuer side, or in my Garden, or neerest pastures, I conferre with my Wife or Seruantes of husbandry, appointing what I will haue doone: if my Bailife haue any thing to say: if any thing be to be bought or solde: for a good husband, as *Cato* saith, must rather be a seller then a byer. Sometimes (specially in Winter) after supper, I make my Minister to tell something out of the holy Scripture, or els some pleasant storie, so that it bee honest and goodly, and suche as may edifie. Two or thre houres after supper I get me to bed, and commonly as I said before, the last in the house, except my Chamberlayne and my Steward.

A good husband must rather be a seller then a byer.

R I G O. In the meane tyme beeing farre from the Church, neither can you heare the Sermons, nor bee present with your wife and your household at seruice: for your owne part though ye may supply the matter with reading, yet your wife and your seruantes can not so doo.

CONO. For my part (without baunt be it spoken, I haue seruice euery day at certaine appointed houres, where preacheth to me daily the Prophetes, the Apostles, *Basil*, *Chrisostome*, *Nazianzen*, *Cyri*, *Ciprian*, *Ambrose*, *Ansten*, and other excellent preachers, whom I am sure I heare with greater profite, then if I should heare your sir *John* lacklatines and foolish felowes in your Churches. My wife also being geue to reading, readeth the Byble & certaine Psalmes translated into our owne tongue, if there be any thing to hard or darke for her, I make her to vnderstande it: besides, she hath pnuate prayers of her owne that she vseth: in the meane tyme I haue one, that vppon the holy dayes (if the weather or our businesse be suche as we can not goe to Church) readeth the Gospell, teacheth the Catechisine, and ministrETH the Sacramentes when tyme requires: but in the Sommer tyme, if the weather be not vnrasonable, we goe alwayes vpon the Sundayes and festinall dayes to our Parishes Church, where wee heare our Curate, and receaue the blessed Communion: as for my household, I bring them to this order, that they alwayes serue God before their going to worke, and

A. iiii.

at

The first booke entreatyng

The saying of
saint Antho-
ny.

at their comming to meales. It is written of *Anthony* the Er-
mite, that being demaunded of a certaine *Philosopher*, howe he
coulde in the solitarie wilbernesse without any bookes, occupie
him selfe in the studie of diuinitie: He answered, that the whole
world serued hym for bookes, as a well furnished Librarie, in
which he alwaies read the wonderfull workmanship of God,
which in euery place stood before his eyes. In the like sort haue
I my household seruantes well instructed in the cheefe grounds
of true religion, who leapyng to their vocation and innocencie of
their life, not caried away with the vaine entisementes and plea-
sures of Cities, doo behold the Maiestie of God in his workes,
and honour the Creator in his Creatures, not onely vppon the
Sundayes, but euery day through the yere, where they may al-
so heare the little Birdes, and other creatures in their kindes,
setting out the glory and Maiestie of God.

R I G O. You seeme to tell mee of a Schole of diuinitie, and
not of a husbandmans Cottage, this was the very order of the
Patriarkes, and the Monasteries in the Primatiue Church.

Homelie. 56.
vpon the. 6.
of Matth.
and in other
places.

C O N O. In deede *Chrysostome* would haue all Christians,
maried folkes and vnmaried, to leade their liues accordyng to
the rule and order of Monkes: but of suche Monkes as liued in
those dayes, not such good felowes as ours be now: for the pro-
fession of a Monke in that age, was no other but the life of the
purest and perfectest Christians, whiche kind of life the old Pa-
triarkes as the Scriptures doo witnesse did leade.

R I G O. I oftentimes wondred, that hauing so goodly a house
and so well furnished in the Citie as you haue, what you meant
to desire rather to dwell in the Countrey: but now that I see the
good order of your life, I leaue to woonder any longer.

C O N O. It is naturall to me, and left mee by my parentes,
to delight in husbandrie: for my Father, my Graundfather, my
great Graundfather, and as farre as I can fetch my petigree,
all my Auncestours were occupiers of husbandry, and were all
borne and died in this house that you see.

R I G O. I remember not long since, being in businesse with
Chaucellour Hypsographus, a sober man, your neighbour & one
that delightes in husbandry, it was my chaunce to see your fa-
ther,

cher, surely a man would haue taken hym for old *Laertes* in *Homer*, or rather for *Abram*, or *Isaac*, & as the *Chamcellour* tolde me, he was foure score and tenne yeres olde: but so faire he bare his age, as I tooke him to be scarce fifty, his memory and iudgement seemed to serue hym wondrous well, he would talke of the orders of the Countrey, of the antiquities there abouts, of the stories of the Scripture, so sweetely and eloquentely, as I was wondrously in loue with hym: he had the *Prophetes* and the *Euangelistes* at his fingers endes, so that I sawe the noble men had hym in estimation, not without great cause.

CONO. In deede he tooke suche delight in the holy Scriptures, as no day passed him without reading some part of them: he vsed to goe commonly euery day to the next *Parish Church*, neither would he misse any Sermon that he coulde heare of, hee brought both *Preacher* and *Priest* into order, and caused them to frame their liues according to the rule of the Gospell.

RIG O. You paint me here the patterne of a *Bishoppe*, or an ouerseer: in deede the most part of these *Priestes* had neede of suche ouerseers to restraine their couetousnesse, the spring of all their abuses.

CONO. To returne to my quietnesse or my husbandry from whence I digressed, doo you yet marueyle howe I can delight mee selfe with this so honest and profitable a quietnesse, then which in the iudgement of the holiest and wisest men, there is nothing more honest nor better, neither is there beside any trade of life more meete for a Gentleman, nor trauayle more acceptable to God, then is the tilling of the ground. The people in the olde time (as *Cato* a man of great wil dome, and a teacher of husbandry doth witnesse) as oft as they would geue a man the name of an honest man, they would call him a good husbände, comprehending in that name as much commendation, as they could geue hym besides, most mightie Kinges and Emperours were no whit ashamed to professe this trade, as *Xenophon* reporteth of king *Cyrus*: the like writeth *Quintus Curtius* of *Abdolominus*. *Numa* the king of the Romanes bare a singuler affection to husbandry, for that hee thought there was no kinde of life so fitte to maintaine either peace or warres, or for the prouision of a mans life,

The commendation of husbandry.

Emperours and kinges professours of husbandry.

The first booke entreating

life, being rather a geuer of good life, then riches. Moreover, *Hiera*, *Philometor*, *Attalus*, *Archilau*, & a great nūber of Princes more, were delighted with the profession of husbandry: this knowledge is also highly comended by *Homer*, the very soittain in his time of wisdom, wheras he describeth *Alcinous* the king of the *Pheaces*, whose delight in the planting and pleasures of his Orchardes was wonderful. And *Laertes* the old man, that with his continuall occupying of husbandry, brought his minde better to beare the absence of his sonne. *Hesiodus* in his worke τὰ ἐργὰ καὶ οἰκίαν geueth great prayse to *Aistrea*, & being banished the Citie, gaue her self to the life of the countrey: Pea the ground hath beforesetyme beene tilled by the handes of Emperours, the Earth in the meane time reioysing to be toyme with a Victors share, and to be plowed with the handes of a triumphant Conquerer, either because they dealt with the like regarde in their seede, as in their warres, or vled such diligence in the Coyne feedes, as they did in the Campe, or els because all things handled with honest and vertuous fingers prosper the better, beeing more carefully looked to. *Serranus* when he was called to honor, was found sowing of seede. The Dictators office was brought by the Purceuant to *Cincinatus* beyng all naked & besmeared with sweat and dust. The Purceuantes had first their name of calling Senatours and Gouvernours, out of the Countrey to the Citie. In like sort had this name at y first, the *Fabii*, the *Pisones*, the *Curii*, the *Lentuli*, the *Ciceroes*, the *Pilumni*, & other auncient houses. *Horace* telleth, that of husbandmen haue been byead the valiantest and worthiest Souldiers, affirming that the hand that hath been vled to the Spade, prooueth often of greatest value in the Feeld. *Homer* reporteth a great valiancy in *Vlisses* his Nethard in the slaughter of those fellows that would haue rauished his maiestresse. Most certaine it is, that a great number of Emperours haue sprung from the plowe. And to let others goe, it is knowen that y Emperours *Galerius* & *Maximinus*, came both of them from poore Herdmen to the imperiall dignitie. The like is writtten of *Iustine*, *Constancianus*, *Probus*, & *Aurelianus*. The stories report, y *M. Curius* y Emperour was found in his house boyling of a Rape roote, whē he refused y great summes of gold brought

Serranus.

Cincinatus.

Husbandmen come to be Emperours.

brought by the Samites Embassadors. What should I speake of the antiquity of it: the holy Scriptures declare hus bandry to be the auncientest of al trades. And to begin with þ very beginning of man, and that neither *Osyris*, nor *Dionysius*, were the first founders of this knowledge, as the *Panims* fable, but that the most mightie Lord him selfe did first ordaine it: for *Adam* & his sonnes were all husbandmen, *Noe* was a planter of Vines, *Abraham*, *Isaac*, and *Jacob*, were shepheards, *Saul* from his Asses, & *Dauid* from his shepe were called to the crowne, *Eliseus* and *Amos* of shepheards were made Prophetes. *Ozias* as we reade professed hus bandry. *Iesus* the sonne of *Syrache* comending hus bandry aboue the rest, saith, he customably vsed him selfe to hold þ plow, to driue the Cart, and to keepe cattell: but what neede we more? Our Sauour Christ him selfe glorieth to be the sonne of a husbandman, and frameth his Parables of plantyng of Vines, of Sheepe and Shepheards: moreouer, as it is in Luke, our Lord seemeth to be a teacher of hus bandry, where he sheweth, þ trees are to be digged about & douned, that thei may prosper the better. For such this knowledge is of al other most vnnot, & without which it is most plaine we are not able to liue: the best & the godliest men haue alwaies imbraced it, and the old fathers haue euer cousted it the very Cosin Germane to wisdom. *Cicero* called it the mistresse of iustice, diligens, & thristinesse: some others cal it the Mother & Nurs of al other artes. For wheras we may liue without þ other, without this we are not able to sustaine our life: besides, the gaine that hereof ariseth, is most godly, and least subiect to enuie, for it hath to deale with the earth, that restoreth with gaine such thinges as is committed vnto her, specially if it be furthered with the blessing of God. The onely gentelmanly way of encreasing the house, is the trade of hus bandry: and for this cause they were alwayes accompted the perfectest Gentlemen, that, content with þ liuing their auncestours left them, liued in the countrey of their landes, not medling with fygging, chopping, and changing, nor seeking their liuing by handicraftes. *M. Varro* in his tyme saith there was great complaint made, that the fathers forsaking the plough and the Sicle, began to crepe into the Towne, and busied themselves rather with Pageantes and

The antiquitie of hus bandry.

The first planter of Vines.

Luke. 13. 8.

Husbandry the mother and nurse of al other artes.

The worthinesse of husbandmen.

The first booke entreatyng

and Midsummer games, then with the Vineyard or the Field, whereas the Gouvernours of Rome so deuised the yere, as they assigned only the nienth day for busines of the Citie, and the rest of the tyme for the tyllage of the Countrey, whereby being hardned with labour in peace, they might the better be able to abyde the trauayle of warres. Which Countrey people were alwayes preferred before the people of the Citie, and more Nobilitie thought to be in them that tyld the ground abroad, then in those that liuing idely within the Wallles, spent their tyme vnder the shadowe of the Penthouse: except a man will, with the common sort, thinke it more honest to get his liuing with the blood and calamitie of poore soules, or not daryng to deale with the sword to make his gayne of marchandize, and beyng a creature of the land, cōtrary to his kind, geue him selfe to the rage of the Seas, and the pleasure of the Windes, wandryng like a Birde from shore to shore, and countrey to countrey, or to folow this goodly profession of bawling at a barre, and for gayne to open his lawes at euery benche. Surely as I saide before, this onely hath been euer counted the innocentest trade of life, of al men, & in all ages.

✱ By husbādry were made rich the godly Fathers, Abram, Loth, Iacob, and Ioaab: and most certaine it is, that this profession and this gayne, is most acceptable to GOD, when he commaunded Adam to till the ground, and to get his liuing with the sweat of his browes. Thus is husbandry of suche authoritie, as GOD with his open witnesse hath allowed it, and afterwarde by his seruāt Moses hath added his blessing vnto it, saying, I will geue the ground my blessing in the sixth yere, and it shall bring forth the frutes of thre yeres. And againe, If you will keepe my commaundementes, I will send you raine in due season, and the Earth shall yeeide her increase, and your trees shall be laden with fruite, the theaf thing tyme shall last til the vintage, and the vintage shall endure till the sowyng tyme, and you shall eate your bread with plenteousnesse. What can there be nowe more pleasant to a Christian man, then to get his liuing by suche meanes as he knoweth dooth please GOD, and to play the Philosopher is the most sweete contemplation of the benefites of God, and to acknowledge and reuerence the wisdome and power of the diuine

Gene. 1.

Husbandry
pleasing to
God.

Leuit. 26.

diuine Maiestie, and his bounteousnesse to mankind, to geue hym thanks and prayse for his goodnesse, the very heaues and Creatures in the Feele in the meane tyme preaching vnto vs.

R I G O. You frame mee here of a husbandman a diuine, and almost bying mee in minde to become a husbandman, who alwayes hitherto with the common sort, accounted this husbandry to be a beastly and a beggerly occupation.

C O N O. What diuinitie there is in it, and what a feed of the acknowledged benefites of God, you haue heard. That the common sort doo thinke it a beastly and a beggerly kinde of life, it is no marueyle, sith the conunon people doo neuer iudge aright. The common people doo woonder at the pompe of the Court, and iudge them for the happiest men, that deckt with golde and purple, are in greatest fauour with Princes, and Officers, and Councillours to them, little knowing in the meane tyme what heapes of sorowes lyes hyd vnder that braue and glitteryng miserie. The conunon sort preferreth shamefull and beastly delicacie, before honest and vertuous labour, ioying to consume the night in drunkennes, leacherie, and villanie, and the day in sleepe and pastime, thinking suche happy, as neither behold the rysing nor setting of the Sunne. But those that are of sounder iudgement, account the husbandmen most happy, if they knewe their owne felicitie, to whom the Earth in a farre quieter maner doth minister a sufficient liuyng.

*And though with gorgeous gates the buyldinges hye,
With early greetings alwayes doo not flowe,
Nor seelyng garnisht gaye with Imagrye,
Nor ritche attyre wee see, nor costly showe:
Yet stedfast state and life vnskild of guyle,
With wealth yenough and pastures ryde at will,
And people strong traynde vp to payne and soyle,
And youth with dyet small contented styll,
Where godly zeale and vertues all dyd dwell,
When Iustice last did bidde the world farewell.*

As the Poete hath most grauely written in the praise of the husband. *Aglaus Sophidus* was iudged happy by the Oracle of *Apollo*, because he occupied a small corner of *Arcauia*, but yet sufficient

Gear. 2.

The first booke entreatyng

sufficient for his liuelode, where he spent his life without euer coming abroad; whose order of life sheweth, that he was neither vexed with greedy desire, neither with any other trouble of minde, as *Plinie* witnesseth. But I holde you to long with commendation of that whiche of it selfe is sufficiently commended. Haue, wife, I pray you let vs goe to dinner.

METELLA. You shall See by and by, God morow maister *RIGO*, I thought *Xenoplutus* had been here, who vseth to fetch my husband away he hath by chaunce been now at home a weeke or twayne, which some misliking, preferre him to most painefull and trouble some businesse, procuring him to be sent in embassage beyond the pillars of *Hercules*, & whiche they would be loth to beare them selues) they cast all vpon his backe as a common packhorse, who being now old, reason would he should be spared and suffered to bee in quiet, that being at the last free from the turmoyles of the world, he might geue him selfe to his prayers, and prepare hym selfe for heauen.

RIGO. It were more for the benefite of his Countrey, that maister *CONO* came oftner to the Court, but he is y seldomer there, because he taketh such pleasure in his husbandry, howbeit, I came for no such purpose, but onely to visite hym, being my olde friend.

CONO. You must beare with a womans babling.

RIGO. I pray you, seeing it is not yet dinner tyme, let vs walke about, that I may viewe your house till dinner be ready.

CONO. If it please you, I will shewe you my house, where I haue appoynted my kingdome.

RIGO. Howe surely you haue as happy and as pleasant a kingdome as may be.

CONO. In dedde I cōfesse me self happy in this, y pretending mee selfe with my poore estate, I desire no more: for as he saith.

The man that most dooth here possesse,
Thou canst not iustly happy name,
But he whom God with giftes dooth blesse,
And well dooth knowe to vse the same:
Hym mayst thou rather rightly call,
A happy man aboue them all.

Surely I,

Who is happy.

Horace.

Surely I, in this my kingdome, or rather poore cottage, am more happy then a greate sort of Kinges and Princes of the world, that are lordes of so many & so large dominions. Riches are not to bee measured by their multitude, but by the minde of the possessor. And as *David* saith, a little is better with the godly, then the great ritchesse of the wicked. *Cincinnatus* occupied onely foure acres of ground. *Socrates* hauyng but twentie markes in all the world, was counted a riche man. So I with *Virgil* doo commend great possessions, but had rather occupie little. Therfore looke not to see here the house of *Lucullus*, or *Hircius*, which is reported to be solde of 4000000. *H.S.* Suche stately dwellinges and marble floores, as *Cicero* saith, I despise.

Who is ritch.

R I G O. Notwithstandyng, here is all thinges faire, and as it appeareth commodiously buyt.

C O N O. For my part, I build my house, as they say, according to my Purse, agreeable to my calling, and to my liuyng. I will shewe you in order how I haue cast it, folowynge the aduise of *Iscomachus* in *Xenophon*, whom *Cicero* doth greatly commend. And first, the seate of my house hath mooued me to build it after this sort. *Cato* would haue a man long in determinatio to build, but to plat & some out of hand. Our fathers herebefore obserued the same, and seemed to folowe the counsell of *Cato* & *Columella*, with whom agreeth also *Plinie*, that the owner build his house in good order, so as neither the house be to great for the lande, nor the lande to muche for the house. And herein it is witten, that *L. Lucullus*, & *Qu. Scenola* were both to blame: for one of them had a greater house then was answerable to his liuyng: the other, which was *Scenola*, built a smaller house the his liuyng required, where both are vnprofitable to the maister: For the great ruinous house, not onely is more chargeable in building, but also asketh greater cost in the maintayning. Againe, if the house be to little, it wil be a destruction & losse of your Corne, & fruite: therefore is it greatly to purpose, in what sort we build and ordeine our house. *Cato* would haue the house so scated, as the ayre be good about it, and (if it may be) placed at the bottome of a hill, looking directly South, and in a holosome corner. *Varros* mind is, to haue it placed toward the East, that it may haue the shade

The order of building of a house for the Countrey.

Cato's
sentētia
The seate of a house.

do we

Dolue in Sommer, and the Sunne in Winter: with whom *Columella* agreeth, saying, that if habilitie serue, the seate is to bee wished in a holsome place (for *Cato* as shall hereafter be shewed would haue healthie standing cheefely regarded) with a fruitfull mould, some part of it champion, some hilly, lying East or South, well watred and woddred, and standing not farre of from some Hauen, or nauigable riuer, to the ende he may cary and transport such things as him listeth. *Cornelius Tacitus* writeth, that the *Seruians* were wont to build their houses, as the Hill, the Riuer, the Wood, or the Lake, would best suffer them.

R I G O. Whereof I thinke sprang at the first so many furnaces, as are at this day deriued from Mountaynes, Riuers, Lakes, and Wooddes.

C O N O. It may be, yet others doo counsaile, in no case to set your house neere a Harthe, or a great Riuer: for the Fennes and Harthes in the heate of the yeere, doo send forth pestilent and deadly dampes, and a great number of venemous Creatures: which dying, for lacke of their old moystoure, infecteth the ayre, and breede sundrye and strange diseases. *Homer* affirmeth very truly, that the ayre whiche in the morning commeth from the Riuer, is very unholsome and dangerous: and therefore if the house must needes bee built neere a Riuer, they would haue suche heede taken, as the Riuer rather stande on the backside of the house, then before it: and that the front of the house be turned from the hurtfull and unholsome winde, and placed towardes the healthiest quarters. Sins all waters commonly with dampish vapours in Sommer, and stinking colde mystes in Winter, except they be well purged with holsome Cloudes, doo infect both man and beast with pestilence: best is it therefore in good and healthie places, to set the house toward the East, or the South, and in suspected ayres to place them against the North. From the Sea it is good to bee as farre as may be, because the winde that blowe from the Sea, are unholsome, and the space lying betwixt you and it, yeeldes alwayes a lothsome ayre. You must beware besides, that you set not your house by any greatchie way, least you be molested with passingers, and troubled oftentimes with more ghestes then you would haue.

R I G O.

RIGO. As farre as I remember, the olde fellows did measure the goodnesse of their dwelling, by the qualities of their neighbours.

Neighbourhood.

CONO. You say very well, in verde I had almost forgotten it, a froward knaue to a mans neighbour, is not one of the leasse mischiefes, as shalbe sayde in the end of this booke. I haue knowne sundrie good men desirous of quietnesse, that haue forsaken good dwellings, rather then they would abide the injuries and troubles of suche companions: wherfore *Hesiodus* had some reason in saying,

As great a mischefe is a froward knaue,

As is the ioy a neighbour good to haue.

But you mornaye what I meane by suche a long preamble, surely I am the longer in this matter, because you should understand the reason of building of my house. For whereas there are sundry purposes of building, and some build for pleasure, some for wantonnes, and some for necessitie, I thought it good to rectifie the mindes of the old wyters, concerning the building of a house. And when as euerie one will not suffer suche curiositie as they require in placing of a house, some building upon Rivers, some without or within the Citie walles, who can not shume the neighbourhood of the River or the Sea, some in Lakes, some in Wooddes, and some building upon mountaines, are vnto supply the defect of nature with arte and industrie, I mee self sith I can by no meanes ampe the neerenesse of the River, doo secke as muche as in mee lyes, to turne away the discommodities: and because I feele the discommoditie of the rylling of the flooddes, I haue set my house in this place without the bankes, and mounted it as hie as I could: and lest the rage of the water, and force of the yce should beare it away, I haue planted rounde about it great trees: and that I might shume the dampes of the ground, and the blastes of unhollsome windes, I haue turned my doore and my windowes to the hollsomest quarters.

RIGO. Surely, either you, or your auncetours haue both commodiously, and handsomely placed this house, for the front is double, one part looking towards the East, the other towards

B.J.

the

The first booke entreatyng

Fronte
est & south

the South, and so built with Galeries and Gables, as it both receiveth the Sunne in winter, and the shadowe in Sommer: besides, you haue a faire Porche as you enter in, that keepeth away the wind and the rayne from the doore.

CONO. All the one side, if you marke it, where the front is, lyeth South, receiuing from the first corner, the rising of the Sunne in Winter, declining somewhat from the West, whereby it is warme in Winter, and not troubled with ouer great heate in Sommer: for this kinde of building both an equal medlie, of the Winter windes and Sommer windes, so that it receiuethe the coole windes in Sommer, and is not subiect to the bitter blastes in Winter, though there be something in it that might be amended, and that doth not well please mee.

RIG O. Some part of the building, mee thinketh, is after the Italian manner.

CONO. Some part of it, being ruinous. I built after my fancie, and such as I found sounde, I thought penough for mee to keepe the reparations.

RIG O. I pray you proceede with the describing of the rest. This base court seemeth also to mee to bee after the Italian fashion with two gates.

CONO. This Court I thus deuised mee selfe. Here was a kinde of Court before, but not so commodious: therfore I made a square wall here with a great gate, for the bringing in of my cariages, and a lesser for people to passe in and out. In the voyde place here besides the Porche, I haue made a little walke, couered with a Vine, with diuers seates in it for shadowe, where I many tymes walke and talke with suche luters As I haue: I haue in it a Table of stone to suppe vppon when I am disposed. Duer against the gate, as you see, at the South side of the court, there is a Backhouse, and a Cornemill, with Quens for bread, and other baked meates, there is also a Brewehouse with an Dast for dyping of Malt to make Beere with.

RIG O. Surely all very handsome, and in very good order.

CONO. These offices (for feare of fyre) you see, are all leuered from the house: there is hereunto adioyning a very fair wel, which besides the seruice here, dooth also serue my Kitchin, and other

her houses of office: for within the house, I haue neither Well nor Fountaine, whiche is a greate discommoditie, such as I would geue a greate deale of money to remedie, both for health and coolenesse in Sommer, and for watring my Gardens and my Dycharres. Water is one of the principallest thinges to be cared for, as the greatest cause of health both in man and beaste: but this want is supplied partly by a good Well without, and partly by Sesterne receauing the rayne water that falles in certayne Conduites and pipes, whiche water is most hollesome for the bodie and beside, the River is not farre of.

Rayne water
most hollesome.

RIG. Come on I pray you, let vs see this Backhouse, I heare that you haue a newe and a strange fashioned Mill of your owne deuise.

My Mill

CONO. You shall see it. When as in a great house, there is greate neede of Corne Milles, and the common Mill, being farre of, the way foule, and I at myne owne libertie to grinde at home, anywhere I lyst, thinking to make a mill here at home, wheneuer place nor authoritie will serue mee to buy to either a water Mill or wind Mill, and a querne, or a hand Mill, dooth but a little good: and to build a horse Mill were more troublesome. When I sawe the wheelles that they be to drawe water with, turned with Asles or more, I thought in the like sort the wheele of a Mill might be turned, and after this sort deuised I this engine, which is couple of Asles, guided by a bar, doo easily turne, and make betwixt foure meale, sufficient for mylie one house, and most tymes for my neighbours, whom I suffer to grinde colle free.

RIG. Surely I like well your deuise. What will not the diligence of man bring to passe?

CONO. I finde it profitable vnto mee, but because it is not the speediest way of grinding, I haue beside a horse Mill, whiche it neede require, is turned about with a Tade or two.

RIG. Lo here is a great leade placed handsonly in a Bricke furnace in the corner, whiche I thinke serueth to biewe withall.

CONO. In dede to that ende is it most occupied, but it serueth other turnes beside.

RIG. There is a Popper (mee thinketh) on the top of the

B. is. East,

The first booke entreatyng

CONO. Whereto serueth it? **RIGO.** It serueth to conuey downe the **Walte**, after it is wated into the hearecloth, where it is dyed.

RIGO. Wherefore serueth that great **Combe**?

CONO. To water the **Barly** in when neede is, other wise it serueth for a **Dashfate**. Hereby is a **Backhouse** and a **Pastrie** with two **Quens**, one seruing for household bread, the other for manchet for myne owne table, and for **Cartes** and fine **bakke-meates**. There are also **troughes** to keepe meale in, and **troughes** to lay leauen in, and there is a **sayre** table to mould upon.

RIGO. All is handsome; but what meanes this building about your **Court**?

CONO. These buildinges seuered from the rest, doo serue for **cheste chambers**, with a chamber for my **hotte house** of this side you see lyeth against the setting of the sunne in **Summer**, where the sunne may lye from noone till night.

RIGO. But that little **Ar** moated about, and seuered from the court with a **Bygge**, seemeth to bee more **glouciouly** and **sumptuously** built, I take it to bee your **chamber**, where you, your wife, and your **seruantes** shal lye safely.

CONO. It is euen so; and therefore it is built vpon a higher ground, both for the safegard of the foundation, and for the better ayre and a fairer prospect: beside, my **Garden** & my **Orchard** are admyting to it, whiche with the **swete smell** of the **floures**, and the **sayre beantie** of the **trees**, bringeth both **health** and **pleasure**. The **wyndowes** for the most part open all **East**, & some of them **North**, very fewe **West**, except from suche **Chambers** or **Galleries** **Southward**, where I dine and sup, to receiue the sunne in **Winter** abundantly, and in **Summer** verie little: the **Tower** that you see serueth for my **Douehouse**.

RIGO. The great **flights** of this house must needs fill the **masters** purse, and serue the **Kitchen** well.

CONO. In deede, if as that noble and passing well learned **Poete** affirmeth, they might be solde as in some ages they haue been at eight pound a payre, or that a man might merite with such **fooles**, as **Columella** writeth of, that haue geuen 40 pound for a payre, I graunt I could make a good handsome **garne** of them,

them, but as they be, they hardly serue myne owne table.

RIG O. What doo. h not the mad desire of delicacie procuret
even in our daies of late I haue heard, there was threescore Flo-
rens geuen for a payre.

CONO. I will keepe you no longer here about mine owne
lodging, you haue seene a greate number of better houses, and
paradventure had rather ouer looke my outhouses.

RIG O. I had so in deede, you haue, I see, deuicid your house
into three partes.

CONO. So I thought it best, one for mee selfe, an other
for my husbandmen, and the thirde for graine and fruite.

RIG O. What meaneth this Cell here so hadsomely built at
the entrance?

CONO. This is for my Bayliffes lodging, I lay him by the
Gate, that he may see who goeth in and out, and what is brought
and goeth forth, from thence he may also looke into the Kit-
chin, and see and heere what is there doone: for beside the uicere
that is dyessed, there are other thinges doone there in the Win-
ter mornings. Ouer my Gate I haue laide my Steward, from
whence he may looke into the Court, and to the Gate, and ouer-
see his neighbour the Bayly.

RIG O. Wary for here is watche and ward in deede, this I
thinke you learned of Varro, for it is a part of his order.

CONO. Thus experience teacheth, Hereby is my storhouse.

RIG O. Mercifull God, what a sort of tooles haue you here?

CONO. Hesiodus would haue a husbande haue all his furui-
ture redy, and will not haue him borowe in any case.

μή σὺ μὲν αἰτῆς ἄλλον, ὅς σε ἀρνήται σὺ δὲ τῇ αἰ-

ἡδὲ ἀρὴ παραμειβεταί, μὴ δὲ δέ τοι ἔργον.

Of others borrowe not, lest they refuse to lend,

So thou shalt want, the tyme shal passe, and businesse neuer end.

Therefore I haue so furnished my Bailiffe, as he hath of euerie
sort two. Marcus Varro deuicideth his husbandry necessaries into
three partes: vowels, where he puts his owne seruantes, & such
as he hyreth: hafe vowels, where his woorking cattell be: and
mutes, be these that you see, whereof the smaller sort be these,

B. iij.

Ares,

Bayliffes
lodging

The first booke entreating

Axes, Hatchettes, and Siches, of all sortes, Copie Siches, Grasse Siches, Scrubble Siches, Handbills, Syckles, Knives, Peasehookes, Spades, Shouels, Wedges, Draggehookes, great Sawes, lesser Sawes, Handsawes, Timberlawes, Pitchforkes, Iron hookes, Iron forks, Twybilles, Dung forkes, Tonges, Sheares, Spars, Hattookes, Fyles, Cleauers, Claspes, Lancets, Stringes, Cutting knives, Gelding tooles, Clipping sheares, Lcauers, Presses, Rulers, Garden Rakes, Hammers, Chippe Axes, Winches, Pulleys, Wheelles, Rakes, single and double, Pokes, Collers, Bydle reynes, Headstalles, Halters, Traaces, Cordes, Haames, Baskets, Fannes, Whippes, Flaels, Strikes, Spoakes, Drawyng knives, Sackes Wallers, Bottels, Weede hookes, Brakes, Henipe betelles, Distaves, Spindelless, Wharles, Fyre shouels, Fyrestones, Credions, Handbarowes, Dung Cartes, Wheelebarowes, Haundes, Hampers, Ropes, and Line, of all sortes. The sortes and partes of Plowes and Maynes, I will shewe you when wee come into the Court next the Heybarne. Hogsheds, Combes, and Uesselles, for Wine, Beere, and Water, Pipes, Tonells, and suche like, shall likewise be shewed you, when you come to the Brewhouse, and Windmiller. With Colerakes, Siues, Sercers, Boulting Tubbes, Boulgars, that you shall see in the Backehouse, and instrumentes for all other purposes, layd by euery one in his place, till they be to bee occupied: for it is very necessarrie to haue of euery sort two, as the number of your seruantes and necessitie requires: that if one bee lost or broken, you be not driuen to goe a borrowyng, or to leaue your worke, whereby your men shalbe idle, while your tooles be a seeking. For to runne euery day to the Towne to get new, is not for a husbonds profite. Beside, in the meane tyme your seruantes loyter, and loose more then the value of their tooles.

R I G O. Truly they be all placed in good order.

CONO. I place first by them selues, such as are most in vse, that they may be the readier, and next to them, suche as be occupied once in a moneth, or in a yere: I geue the keying of them ad by tale, to my steward or my bailiffe, that they may deliuer them out as neede is, and lay them vp againe, and charge them in any case

case to looke to them euery mo neth, that they may mend what is amisse in them.

RIGO. Order is a lolly fellowe, and no goodlier a thyng in a man, then to doo euery thing orderly, and to lay vp euery thing in suche order, as it may redily be found, of whiche a singular example dooth *Iscomachus* shewe in *Xenophon*, in his Phenician barke, wherein a wonder it is to see what a deale of stuffe he hath bestowed in so small a vessell: he caried with him all the furniture that a man should neede, and euery thing in suche order placed, as they were at hand when neede was, without any trouble.

Order

CONO. I mee selfe haue an inuentorie of all my husbandry implementes, and so hath my Bayly and his Wife, my Steward hath the key of the storehouse, and deliuers out, and receaues, as I told you, what euery man needes: for I willingly neither borrowe nor lend: I haue a neighbour or twaine, of whom sometime I borrowe, and lende agayne: but except them, to none as *Cato* teacheth mee.

RIGO. The same *Cato* also as I remeber, teacheth to knowe a mans husbandry by his tooles, & therfore by your great number of tooles, a man may gesse you haue a great deale of occupying.

CONO. The double number of them makes the muster the greater: other wise, if they were but to serue the turne, they would not seeme so many.

RIGO. I pray you goe forward with your description.

CONO. You see a boyd roome before the Kitchen, which is an entrie both to the Kitchen, to the folkes Chamber, and to the Orhouses, which ought to be neere together, if any misfortune shoulde happen to the Cartell in the night, that my men might speedily helpe them.

RIGO. The Kitchen is very well handled, in that you haue so well pargetted the rooffe. The Kitchen

CONO. It is because I haue a great number of seruantes, which for lacke of other roome, dooe dine and suppe here: beside, the pargetting or seeling, is a good safetie against fyre.

RIGO. Here is a good handsome rooffe by the Chimney, well stowed with redde Hearing, Bacon, and Hartinas beefe, there is also a handsome sincke by the Kitchen.

B. iij.

COON.

The first booke entreatyng

Larder.

Corneloft.

Appleloft.

CONO. This lettised wall that you see, ioyneeth to my Bay-
 liffes chamber, so that he may see what is doone in the Kitchin,
 and about the house. Hereunto is also ioyned my Larder, a vault
 with thre roomes, one seruyng for Butter and Milke, the other
 for Beere and Wine, the thurde for to keepe fleshe in: here haue
 I no windowes to the South, nor to the West, but all to the
 North, and to the East, because these quarters are least subiect,
 to corruption, and will longest preserue any thyng. Aboue in the
 loft yonder, do I lay my corne vpon a fayre floore, closely fenced
 and seeled against Wyle, receauing the light by lattisse windowes
 from the North. Harde by, is an other loft very close, with like
 windowes towarde the North, seruyng for my fruite: for that
 quarter is colde, and not moist, whereby it preserues best, both
 Meate, Corne, and fruite. Nowe if you will goe through this
 doore, you may beholde the backside of my houle: loe here a faire
 theasshing floore, wherupon my Corne is sundry times theas-
 shed, fanned, and windowed, and many other thinges doone,
 cheefely in the Winter mornynge, though I haue beside a
 theasshing place in my barne. On eache side, are lodgingses for
 my seruantes, and other roomes and loftes for strawy and fodder
 for my cattell: and there by the stables, are also seruantes lod-
 ginges one euery side, and my maides Chamber neere the Kit-
 ching, and the washing house. You see this fore stall closed round
 about, to p end that the cattell, when they be watred & put forth,
 whilk their houses bee made cleane, may be in safetie. And here
 I keepe also Geese, Duckes, Peacocks, Turckiockes, and o-
 ther poultry. It is as you see, so enclosed with stables, barnes, &
 other houses, that nothyng can get out. Varro will in any case
 haue two courtes, an inner court with a litle pond in it of stading
 water, or running water, in maner of a Fishpond, and there he
 would haue Horse and Oren, comming from the Feelde, or sta-
 ble, to be watred and washed, and to serue likewise for Sheepe,
 Swyne, and Geese. In the vtter court would he haue a Lake to
 cast in wheelles, stauies, and peeces of timber, for instrumentes
 of husbandry, that they might there be seasoned. This court he
 would haue often strawed with strawe, and Chaffe, that be-
 ing trampled with cattell, it may serue to lay vpon the ground.

You

You see in this Court a double dounghill, one of them newly throwen out of the Stables, an other olde one seruing for the Feelde: for newe dounge is nothing so good as the olde, for manuring of the ground.

RIGO. What meanes these twigges, bowes, and strawes, cast vpon the dounge?

CONO. This preserues the dounge, that the iuyce that the ground requires, be not sucked out of the sunne; and hither also runnes the water from the Laundry to moisten it the better. *Varro* would haue here also a lodging for seruantes. But lest we tarry to long among the dounghilles, let vs goe see the other buildinges about the Court. These great roomes that you see, bee Barnes to laye Corne in. In some places they vse houses, in others againe, stackes set vpon proppes, which they call mowes: but the houses are a great deale better. Next to the Barnes, are the stables, standing arowe round about the court. And because *Virgil* would haue the stable stande toward the South, and *Virgilium*, neere the fyre, I haue folowed their order in building my stables. And firste haue I set here my Stable for my Cart horse. I haue an other stable neere myne owne lodging, for my Horses of seruice, and Hackneyes.

RIGO. That seemeth to be very handsomely built.

CONO. The next are houses for my sheepe, & next them for Kine, Calues, & Heifers. There is a Hogstie with two roomes: one for my farrowyng sowes, the other for Hoggies and Bores. There is also a thirde stie, not farre from the washhouse, for the fattying of my Horkes: euery kinde hath their keepers lying neere them, that they may be at hand whatsoeuer chaunceth. Last of all there stands my Heybarne, which hath in y^e vpper roomes my Hey, and beneath, Mowes, Cartes, Carres, Waggones, Coaches, Harrowes, Sledes, Plowes, Rowlers, Wheelles, Haues, Cartshooes, Dokes, Rakes, Plowbeames, and suche other like, whiche are th^ere safe from wet, and from pilferers.

RIGO. I pray you who dooth looke to all this geare, and keepeth euery man to his worke?

CONO. My Bayliffe, as I tolde you before, ouer seeth both my worke and my workemen: besides, I haue a Stewarde that

Old dunge
on the
carte to lay
fabour
with bones
R straw to
preserue the
iuyce of the
dunge.
Barnes.

Stables.

The first booke entreating

that looketh to the recreating of my reuenues and commodities.

R I G O. Your Bayliffe had neede to be a skilfull and trustie man.

The choyse
of a Bailiffe of
husbandry.

C O N O. You say true, for as *Xenophon* saith, the choyse of a Bayliffe and a Philition ought to be one: you must choose suche a one, as being a very expert husbandman, may well be able to take the charge, and not to be ignorant of those things him selfe, that he commatundeth others to doo: for nothing is well taught or learned, without example. For as *Cato* saith of a husband of the olde stampe, it goeth ill with that maister whom the Bailiffe must teach, As *Iscomachus* being demanded of *Socrates*, whether he would buye a Bayly, as he would hire a Smith, or rather teache him hym selfe at home: He answered, he would haue hym of his owne teaching.

R I G O. But this is after the olde world, wherein no man was vnskilfull: but it is a wonder, how you that haue alwayes been brought vp in Princes affayres, could in these dayes (when very fewe, except Scholmen, and such as haue no other trade of lyfe, haue any skill in it) apply your minde so vnto it, as a man would thinke you had neuer minded any other profession.

What thinges
ought to bee
in a Bailiffe
of husbandry

C O N O. Surely I thinke hee shall neuer haue a good Baylye, that is not able him selfe to iudge skilfully of him: nor let him euer thinke to haue his worke well done, that knoweth not how nor which way thinges ought to be doone, but must be faine to learne of his man: for there is none can iudge of a worke but a workeman. Therefore in the choyse of a Bayliffe, I would haue foure thinges cheefely considered: that he bee loving, diligent, meete to rule, and trustie; and if you will adde a fyft, I am well contented, that is, that he be not geuen to drunkenness: for a drunken man loseth with his memorie the regarde of his dutie. I doo not enquire whether hee haue been brought vp ciuilly or vnciuilly, but I would haue hym a hard fellowe, brought vp from his childehood to labour, and one that were thoroughly well skilled, of a meane age, that he bee not vnwilling to worke for youth, nor vnable to trauaile for age. I would haue hym haue some skill in Carpentrie, that if there happened to be any thing broken about his Stables, his Cartes, or any other his instruments,

mentes, he might speedely mend them, and that he could mende
 Mallies and Hedges. I would haue hym also not vnskillfull in
 the diseases of cattell: suche a one as hath been brought vp with
 skillfull husbandes, will prooue meetest to haue charge. For
 there be a great number, that though they be skillful penough in
 their profession, yet haue they not gouernment in them: but ey-
 ther vsing to muche sharynesse, or to muche gentlenesse towar-
 des suche as be vnder them, doo hinder the profite of their mai-
 ster, and therefore I would haue a Bayliffe well tried before he
 be taken: neither is it only to be sought, whether he be skillfull in
 this craft, but whether he be trustie and louing to his maister,
 without which, he is not woorth a Rushe, though his skill bee
 neuer so great. And cheefely, he must be skillfull in this, to know
 what woork is meetest for euery man: for some woorkes re-
 quire strength more then skill, and others, otherwise. And
 therefore in appointyng of these, he ought to haue great iudge-
 ment and good discretion, which he can not haue, except he haue
 good skill. Therefore a Bayliffe is as well to bee taught as a
 Smith, or a Carpenter: and the knowledge of husbandry is
 greater and of more difficultie. Wherefore I marueyle, that in
 this so necessarie an occupation, there are found so fewe maisters
 and prentices.

Exemplified
to be a Bayliffe

2 of the grea-
test things
required in
a Bayliffe.

RIG O. Perhaps the tediousnesse and hardnesse thereof dri-
 ueth them away.

CONO. Why haue not Orators been likewise driuen away,
 for hitherto as Cicero sayth, there hath been no perfect Orator
 found.

RIG O. Of whom would you haue your Bayliffe to be taught?

CONO. Your question is good, I will shewe you, though
 very few haue taught what belongeth to a husband in all things,
 neither shall you finde many skillfull in euery point. Therefore he
 that shall be a Baylie, must be taught by degrees, he must first
 begin when hee is a child, with keeping of Sheepe or Swyne,
 and when he is elder, with droues of cattell, & keeping of horse:
 he must learne next to digge, to theash, to set, to sow, to hedge,
 to build, to mend such things as are broken, to play the butcher,
 to geue drinckes and medicines to sicke cattell, & such other like
 things.

The trayning
of a Bayliffe.

The first booke entreatyng

thinges. And thus must hee proceede from one to another, tyll hauing passed them all, he come to be a maister, euen as *Gregory Nazianzen* teacheth of a Bishop, and as *Tully* would haue a generall, after he hath bozne all other offices of the seeke.

RIGO. You shewe me woonderfull philosophie.

CONO. As I said at the first, his best age is betwixt thirtie and threescore: for the flames of lustie youth beginning to abate, he will not be so hotte in his wooing: for whyle he folowes that game, he will haue no minde but of his minion, neither shall any reward be so welcome vnto him, as the fruite of his fancie, nor any greefe so great to him, as the failing of his desire. If he once passe threescore, he wareth slouthfull and vnable to labour. For I had rather haue the wooke of a painefull and diligent Bayliffe, then the seruice of a great number of slouthful lubbers: as he that had rather haue a Lion captaine ouer Hartes, then a Hart captaine ouer Lions. This must cheefely be looked vnto (sins early going to wooke is a great matter) that the Bayliffe bee a good riser, and that, supplying his maisters place, he may be the first vp in the mornynge, and the last that goeth to bedde, and that hee see the doores fast locked, and euery man in bedde, that the cattel haue meate penough, and be well litted, that he set forwarde, according to the time of the yeere, suche as doo lopter in their labour, that he hym selfe goe lustely before, that he suffer no man after it is day to lagge behind, but that they folowe the Bayliffe lustely with a courage, as if hee were their captaine in a skirmishe: and that he vse sundry deuises to cheare them vp in their labour, sometime as it were to helpe hym that fainteth, to take his tooke out of his hand, and labour lustely before him. And as a carefull shepheard earlie carping out his sheepe, and bringyng them home late, looketh that he leaue none of his flocke behinde hym: so likewise ought a good Bayliffe to carrie out his men, and to haue good regard ouer them. If any of them happen to be hurt or sicke, let him looke to the dressing of them, and if they bee verie sicke, to carrie them to the sicke folkes lodging, and to see that they bee well ordered: and to that vse haue I built yonder house that you see, remooued from the other buildinges, that the sicke may bee had thither and looked vnto, specially if their diseases

only to wit
30 & 60 year
old.

leases be contagious, lest other should be infected. It is the mai-
sters duetie to haue such regarde of the health of his seruantes,
and to haue such care of them, that their sickness may be preuen-
ted by good medicines and good looking to: as to see that they
meate and drinke bee wholsome and good, and geuen in due sea-
son: beside, that the Bailiffe eate his meate with them, and not
by hym selfe, whereby it shalbe the better ordered. And because
physicians are not alwayes at hand in the countrey, it behoueth
to vse such remedies as experience hath taught, and such as haue
holpen others of like diseases. Those that labour in the Summe
(because the Summe hurteth the bodie and the haynes) they
diet must be the thinner, that they make not to great meales, but
eate little and oftens: this order keepeth them in health, and hel-
peth digestion. Some drinke to greue Clooymewood wine, or
potage made of Clooymewood. It is verie necessarie for them
sometimes to recreate them selues, so that in the meane whyle
they geue not themselves to noughtinesse. There must be heede
taken, that they drinke not when they be hotte, nor lye vppon the
cold ground if their water be not good, it must be well purified.
It is verie good also to let them drinke Barly water. Men must
remember that seruantes be men besides, such good looking to,
will breede a greater good will and duetie, and lightly they will
serue the faithfuller and better when they haue their health,
whiche haue had good cherishing in their sicknesse: and besides
(whiche is not so well obserued in greater governours) the Bay-
liffe must beware that he deale not to cruelly, nor to gently, with
them, that he alwayes make muche of those that be diligent and
painefull, that he be not to hasty with the woozler sort, that they
may rather reuerence him for his severity, then hate him for his
crueltie, whiche he shall safely lopping to passe, if hee rather be-
ware that they offend not, then after their offence to late to pu-
nish them. For there is none so good a hyde for an euill disposed
person, as to let him alwaies be occupied. So that *Cato*es saying
herewith is most true, that men in dooing nothing, learne to doo
euill. Let them haue their allowance and their meate in due sea-
son, let them alwaies feede together in one place, and the Bay-
liffe with them, that he may be an example to them of all thristi-
nesse,

The first booke entreating

nesse. If hee finde any of them to haue laboured painefully and truly, let him geue them a good countenance, & encourage them with rewardes, to make them the willinger to doo their dutie: beside, let him looke that they be rather well clothed, then curiously aparelled, that their garments may keepe them from the cold and the rayne: let their wages be well payde them, that they want thereof be no excuse for them to loyter in their sabbour. And as meate and apparell is necessarie for them, so likewise is correction. For the wise man saith, Geue a horse the whip, an Asse the staffell, and a foole the rodde. And agayne, He that deales to gently with his seruantes, shall make them in the ende stubborn and froward. Aboue all thinges let hym see that they feare God, let hym in no wise suffer them to sweare or to blasphem, nor to vse filthy or ungodly speech: but let him prouide that they be instructed in the Catherisime, that they vse prayer, that they go to sermons vpon the holy dayes, and receaue the Sacraments at tymes appoynted, that they bee not hunters of Alehouse, or euill company. For as the poet saith, It is lawfull to bee well occupied, euen on the festiuall dayes. When they haue serued God, and dyed, let them walke abrode in the ground, let them looke there be no cattell in the Coyn, and stappe suche Gappes as they finde open, and looke that their Cattell bee in safetie abroad. To be short, the Bailiffe must in all these matters be as it were a Bishop, or a maister of the woorkes, so shall euery man the better doo the woork that belongeth vnto him. The Bailiffe must neuer be from their heeles, least in his absence they fall to loytering, neither must he suffer them any time to be soe: he himselfe must not be geuen to drinkeing or gaming; nor to hunting or fyllhing, except for his maisters profite: let him very seldom enterpne any ghesles, except they be of his maisters retinue: let him not bestow his maisters money about his owne merchandise, for such kinde of bargayning makes him the slacker in his dutie, and maketh his accomptes seldom fall out iust. Aboue all thinges this is to be wished in the Bailiffe, that he doo not thinke him selfe wiser then his maister, or suppose him selfe to haue more skill then hee hath, and that hee alwayes seeke to learne suche thinges as he is ignorant of. For as it is very profit-
table

*Amended to be
summed in a
Baglife.*

table to doo any thing skilfully, so is it more hurtfull to doo it un-
to wardly. *Columella* had rather haue a Bailiffe that could nei-
ther reade nor write, so that his memoꝝ be good: for such a Bai-
liffe (saith he) will oftner bring his maister money, then a booke:
because (not able to write) he can not so easely frame a false ac-
compt. The Bailiffes wyfe must alwayes be with hym, that she
may keepe hym from running at rouers, and may helpe hym in
his labours: her age must be such also, as we required in the Bai-
liffe before, he must be painefull, healthy, carefull, and honest, she
must not be too ysaucoured, lest she be lothesome vnto him, nor too
beautifull, least hee doate too muche vpon her, and keepe home
when he should be abroad. She must in the meane time looke to
the Kitchin, and to other workes at home, gouerne the maides,
and keepe them at their woorkes, looke to their necessaries, and
geue them their allowance.

The Bailiffes
wyfe.

R I G O. You seeme to mee here, to make the Bailiffe a mai-
ster, and the maister a Bailiffe.

C O N O. This age of ours, quite corrupted with delicacie
and dayntinesse, little regardeth the honest and profitable orders
of our forefathers: for in those dayes the maisters them selues
plaide the husbundes, and thought it not to goe well with that
maister that must be taught by his Bailiffe, as *Cato* witnesseth,
and *Varro* also complaineth, that the husbundes in his dayes had
forsaken the plowe and the sith, and gotten them selues with-
in the walles, and spent their tyme rather in Day games and
Midsonner sightes, then with tilling the ground, or planting
of Vines. Therefore *Cato* & the old writers doo attribute many
thinges to the maister, that we assigne to the Bailiffe. And I,
though I seeme to put the charge of the household in the handes
of my Bailiffe, yet will I mee selfe be ouerseer, and haue euery
thing doone as I appoynt, entreating gently (as I taught the
Bailiffe afore) both the Bailiffe and my labourers, regardyng
more their labour then my gaynes. But I carrie you about too
long, being fasting, I pray you let vs go to dinner: you shal not
dine at the Court to day, neither me at I to shew you, as you see,
the pallace of *Lucullus*, but y^e poore cotage of *Cincmarus*, *Abdo-*
laminus, or *Laertes*. Here you see y^e roome for my husbandomen,

seuered

The first booke entreatyng

seuered from myne owne house, but yet so, as I may easily see
whatsoever they doo. Here I and my wife with our householde
seruauntes doe lye.

RIGO. All very excellently well as may be, there is nothing
wantyng that is to be wished for. Maistresse **METELLA**,
you trouble your selfe to muche, like *Martha*, about the provi-
ding of your dinner.

METELLA. Not a whit les, you must bee contented
with Countrey fare, you shal neither haue redde Dcere, March-
pane, nor Scurgian, nor any Courtiers fare: but an Egge, and
a Sallet, a Poulet, or a peece of Lambe.

RIGO. This diete contenteth mee aboue all other.

CONO. As to it che, I tel me how you like our countrey wine

RIGO. Surely it passeth either wine of Orleans, or Anio. I
did not thinke to haue founde so good a cuppe of wine in these
quarters.

CONO. The husbandry, and good season of the yere doth
peeld the same.

RIGO. Well, we sit to long at dinner. The weather being
so faire and so pleasant abrode, it is a shame to sit any longer, but
to walke out and looke vpon your ground.

CONO. The weather being faire, you bring a Horse to the
Feedde (as they say) when you speake to mee of goyng abrode:
for I mee selfe, if the weather or businesse doo not let mee, am
euery day, according to *Catoes* counsell, abrode in my ground:
and if it please you, I will carie you abroade and shewe you my
ground. You must not looke to see the greate Countreys of
Metellus or *Lucullus*, but the possessions of a poore Countrey
man, that contented with his state, would be as he is, & would
not change liues with the Emperour.

RIGO. I pray you let mee here pour opinion of the Feedd,
and the silture thereof: for I see you are a perfect husband; and
nothing vni killish. I haue a greate desyre to heare some rules,
and suche as serue our turne best.

CONO. If it be a shame for an apprentice at the lawe, and a
pleader of causes to be ignorant of the lawe wherein he dealeth,
a greater shame is it for a professor of husbandry, to be vni skillful

in

Of the tylling
and husband-
ing of the
ground.

in the ground whereon his whole trade lieth. Howe is he able to iudge vprightly in husbandry, that knoweth not which way to tyll his land: The professours of all other artes, do commonly keepe to them selues, such thinges as be the chiefe mysteries of their knowledge. Contrariwise, the husband reioyceth to haue euery body made priuie to his skill, and beeyng demaunded in what sort he dooth this and that, he gladly declareth his whole dealing in euery point: such good natured men dooth this knowledge make. I haue ordered my ground here, according to the diligence of the olde fachers, rather then for the wantonnesse of these times. Therfore I will first shewe you their opinions, and afterwards myne owne fancie. First, *Cato* appointeth niene degrees of the land in *Italie*. The first, the Vineyard, that yeldeth much and good wine: the next, the well watred Garden: the third, the Wyllowe Grove: the fourth, for Oliue trees: the fifth, for Heddwes: the sixth, for Corne ground: the seuenth, for Coppie ground: the eight, for Timber trees: the last, for Past. But these degrees as *Varro* saith, are not generally allowed of, neither haue we the vse of them all in these Countreys: but make most accompt of suche lande, as serueth for Garden or Orchard grounde, Corne, or Fishpondes. Of Corne ground I wil firste entreate, and after wardes of Pasture, Heddwes, Wood Land, and Wyllowe Groves.

The good nature of the husbandman

The degrees and sortes of ground.

Nonem

R I G O. I pray you then take the paines to shewe the nature of it, and which way the best ground may be knowen.

Of Corne ground.

CO N O. *Cato* counteth that the best ground, that lyeth at the foote of a mountayne, being leuell and lying toward the Sunne, as the whole Coutrey of *Italie* lyeth. In colde and Northerlye Countreys, it is good to haue the lande lying East and South, least these two quarters, being bard of by any hil, the land be frozen with colde: but in hotte Countreys it is better to haue the ground lye North, both for pleasure and health.

R I G O. They say it is needefull to knowe the conditions of euery ground.

CO N O. It is so, and sooner shall you doo it, then the conditions of a man: for being well tilled, it will not deceaue you, but deale iustly with you. To knowe the nature of euery grounde,

C. i.

Iscomachus

The first booke entreating

Howe to
knowe the
goodnesse of
the ground.

stones becom
manuring
land.

Isomachus in *Xenophon*, doth will you to marke wel the planters
and the peels of the Countrey, except you will loose your labour
or fight with God. *Varro* counsels you to looke whether there be
in the lande either Stone, Marble, Sande, Grauell, Raddell,
Chalke, Clape, Pebble, or Carbuncle, that is ground ouer hea-
ted and parched with the Sunne, whiche will burne the rootes
of what so euer commeth in it. Also if it be wette or weeping
ground, or subiect vnto other inconueniences, and such ground
also, according to the nature of the soyle, is good or euil. In some
Countreys stonie ground is altogether barren, specially for
Corne and Fruite. In other places agayne, they vse stones in
the manuring and bettring of their lande, as in certayne places
of Arden is to be seen. *Theophrastus* writeth, that *Corinthus* did
cast away all the stones out of the feeldes of *Sarragosa*, & there-
by made the ground the worse, when the stones being away and
the Countrey hot, there was no succour left to defend the ground
from the extreame heate of the Sunne. In other places in stonie
and hilly groundes Otes doo prosper well. In like sorte, in all
Countreys we must regarde the laye of the Countrey, and the
nature of the seede that we sowe: for Grauell in some places is
cast vpon the ground in steade of dung, and some thinges pro-
sper best in grauely groundes. In Barbarie (as *Columella* dooth
witnesse) the very rotten sandes exceede any other grounde in
fruitfulnesse. It is also something to the purpose, whether the
grauell be white, redde, or yellowe: besides, some ground dooth
deceau both with colour and qualitie. In some Countreys the
blacke mould is onely esteemed: in others, the fat red mould is
thought best. In England, the chalkie ground beareth good
corne, and pastures very wel. In some places the thicke and the
clammye ground is most fruitful. In al these it is to be learned,
what is best for the hill ground, what for the valley, what for the
tilled, what for the lepe ground, what the moyst sergie ground
requires, and what the drie and barraine. Also in planting, what
ground is best for vines, what for other trees, what delightes in
drie ground, what in moyst ground. *Virgil* commendeth a mellow
ground that is fatte, and will soone be resolued, for such ground
is tilled with least charge and labour: the next, is that whiche
is

Best ground

a seconde sort
of ground,

is fatte and stiffe, which greatly recompenceth the husband his
trauaile and charges: the woorst, is that which is dry, leane, and
stiffe: for both it is tilled with great labour, and beside, neither
answeareth in his crophe the husbands trauaile, neither serueth
it for good meddow or pasture any time after, and therefore such
ground is not to bee medled withall. Also, the goodnesse of the
ground is easely perceaued by perfect tokens: for a clod sprink-
led with a little water, if in working with y^e hand it be clammye,
and cleauing, and sticketh to the fingers like pitch, when it is
handled as the Poete sayth, and breaketh not in falling to the
grounde, this sheweth a naturall fatnesse and richenesse to be in
it: besides, you may knowe the mould that is good for Corne, if
it beare Bulrushes, Chiffels, Checleaued grasse, Danewort,
Brambles, Blackthorne, and such like, as neuer growe but in
good ground: as on the other syde, lothsome and illfaouered
weedes, declare a leane and a bitter ground: ferne, and wither-
red planties, a colde grounde: sadde, and heauy coloured, a moyst
and a wet ground: a raddell and a stony ground, is discerned by
the eye, a stiffe and tough clay, by the labour and toyle of the
Dren. A good token is it also of good ground, where the Crows
and the Pyes folow in great number the plowe, scraping in the
steppes of the plowman. The goodnesse is likewise knowen, if
at the Summe setting, after a Raynebowe, and in a shewe of
rayne folowynge a great drouthe, it yeeldeth a pleasaunt sauour:
also in taste it will appeare, if tastynge a clodde that hath been wa-
tered in an earthen vessell, you finde it sweete, it is a signe of riche
grounde, if bitter, a great token of barren ground, if it be sal-
tishe, it is to be shunned, and not to be vsed vpon the dounghill.
You must remember also, that ground will some tyme change,
and of fruitefull become barren, whiche hath been seen, as Plinie
reporteth, in the old time in Thessali, and in our time, in sundry
places of our Countrey. Beside, one kind of ground, though it be
neuer so fertill, will not beare all thinges, as the Poete wysely
noteth, *Ne serues one ground for enery Crophe*. Moreover, the
disposition of the Heauens is a great matter, al Countries haue
not the weather and ayre alike: wherefore it is the part of a good
husband to knowe the nature and property of his ground, and to

y^e worst sort
of grownde.

Signes of the
goodnesse of
the ground.

Ground will
change.

The disposi-
tion of the
heauens to
be obserued.

The first booke entreatyng

marke the disposition of it for euery part of the yeere: he must also consider what Crophe is best for euery layer. Some ground serueth for Corne, some for Vines, some for Oliues, some for Meddowe, some for Pasture, neither may all thinges well bee sowed in ritche ground, nor nothing in barren ground. Suche thinges as neede not muche moysture, are best sowed in lyght ground, as the great Clauer, Sperie, Chich, & the other pulles that are pulled and not cut. Those that require more sustenance, are sowed in richer ground, as Potte hearbes, Wheate, Rye, Barley, Linseede. Some of them doo good to the grounde the yere folowing, as Lupines that are vled to be sowed for the bettering of the grounde. There is difference also to be put betwixt fruites for pleasure, and such as be for profite: as fruite trees and flowres, and such thinges as yeeld both pleasure and sustenance, and are also profitable to the ground. You must choose for Apples, Pylowes, Olyues, and Reedes, a wette and a marishe ground: and contrary where you will haue Corne & Pulse, that delightes in drie ground, Sperage & such like, must be sowed in shaddowy places, and other good for Quicksets, Timber, Past, & Fowel: yea such ground as is very grauell and barren, hath his vse, where you may plant Birch, and such like, and waterie grounds where you may set Alders, Broome, and Bullrushes.

R I G O. Surely the temperature of the ayre, doth very much in the fruitfulnessse of the grounde, for I haue oftentimes marked, that one kind of ground is more fruitfull in one Countrey, then in another.

CONO. In *Venesri*, the grauell ground beares Oliues best, where as about *Granado*, they require y^e richest ground that may bee. When in other places the Vine doth not prosper very well in stonie groundes, about the *Rhine* the verie ragged rockes doo yeelde as fruitfull Vines as may bee seene. *Plinie* doth witness, that in some places the Vines do growe euen in the Fennes and Marshes, suche a secreete force is there in nature. About *Chalcia*, an Ilande about the *Rodes*, it is said there is a peece of ground so fruitfull, that they mowe their Barley being sowed in his season, and their Crophe, sowe it agayne, and geather it with their other grayne. The *Albanoyes* receaue the fruite of they^r

lande

Lupines better
y^e ground

wylow

Birch

The grapes that
make shynish
Wine, grow amongst
rockes.

landē ἀπαρτα καὶ ἀνθρωτὰ untilled & unsowen, and being once sowed, it yeldeth his Crop three yerres togeather. *Homer* calleth *Phrygia* ἀμπελοέσσαν, & *Argos* πολὺ πορὸν. *Herodotus* writeth, that *Babylon* is so fruitefull, as the grounde yecideth encrease two hundred and thre hundred folde. *Plinie* affirmieth, the encrease in his time to be fiftie, and to good hus bandes, an hundred folde. About *Monte Gibello*, it is reported by credible persons, to bee an hundred folde. *Italy* is so fruitefull, that *Varro* calleth it the Garden of the worlde, because it is so fertill and well planted in euery place: *Campania*, being full of Corne: *Apulia*, plenteous with Wine: and *Venafri*, abounding with oyle.

Italy, the garden of the world.

R I G O. I haue heard say, that *Germanie* and *Fraunce* haue not been in times past very fertill, and that they haue been altogether without Vines, and now we see no Countrey more fruitefull, that yeldeth greater abundance of all things. Where can you finde better wines, then about *Bauaer* and the *Rhine*? I speake not of their great store of Graine, Mines of Gold, Silver, Iron, and Leade. In the Countrey of *Thury* in *Germanie*, it is sayde, that after Wheate once sowed, the ground will yeldoe Rye of it selfe two yerres togeather.

The fruitfulness of Germanie.

C O N O. Pea, and in our Countrey here, we haue ground that will beare Wheate euery yeere. Rape seede being once sowed with vs, dooth often yeld his Crop two yerres togeather, without sowing or labouring.

Rape seede.

R I G O. Under the Northern Pole it is reported the ground is so fertill, as they sow in the Morning, and reape at Noone. In *Barbarie*, where the ground is lowe, they plant vnder the Date tree the Oliue, vnder the Oliue the Figge tree, vnder the Figge the Pomegranate, vnder it the Vine, vnder y Vine they sow Wheate, and vnder Wheate Pulse, all prospering one vnder the others shadowe, and yelding their frutte the same yere.

The fruitfulness of Barbary.

C O N O. That made mee to say, that the ground folowes the disposition of the Heauens.

R I G O. But such in all places the ground is not of like goodnesse, what if we channell vpon a leane and a barren ground, as Heathy, Bathy, and Graueley ground? may these bee made fruitefull, and menbed by arte?

C. lii.

C O N O.

The first booke entreating

CONO. Very well, there is no Countrey that the most gracious Lorde hath left without sufficient peeld, if labour and tra-
uayle be not refused.

RIGO. That skill I would gladly understand.

CONO. It is brought to passe diuers wayes, principally
Of dounching of ground. by dounching and diligent labour: and to this end serue those hea-
pes of dounch that I lately shewed you.

RIGO. I pray you let mee knowe what dounch dooth most
enriche the ground.

The sortes of
dounch.

Doung of Doue

mans Vrine. kept

ix monethes
is good for fruit
trees and vines

As for
sheepe
upon
horse

Lupines, & other
beanes

Strawe forne
beanes strawe w
apples & other
fruit to make doung of

CONO. Varro, & Columella his follower, appoint thre sortes
of dounches: the first of Poultrie, the next of Hen, the thirde of
Cattell. Of the first sort, the best is that whiche is had out of
Douchouses, the next is of Pullepne, and al other foule, except
Gese and Duckes, which is hurtfull. The people in the old age
had such store of Poultrie and Foule, as the dounch of them suf-
fised for p manuring of their ground. The next to this, is mans
ordure, if it bee mixed with other rubbishe of the house: for of it
selfe it is to hot, and burnes the ground. Mans urine beyng fire
monethes kept, and powred vpon the rootes of Apple trees and
Vines, brings great fruitefulnessse to the trees, and geueth a
pleasant taste to the fruite. In the thirde place is the dounch of
Cattell, wherof the best is the dounch of Asses, because this beast
doth chaw with most leysure, whereby his meate being wel di-
gested, is made the profitabler dounch. Next to this, is the dounch
of Sheepe, next of Goates, then of Oxen, & Horses: the worst
of all of Swine, very hurtfull to Corne, but used in some places
for Gardens, for lacke of other dounch, but is a great breeder of
nosyome weedes: yet Plinie seemeth to allowe it, as the filch of a
filchy creature. The dounch of Horses likewise, where the Hor-
ses are fedde with Barley, dooth breede great store of weedes.
The Lupine before he beare his Cobbe, is most commended, be-
ing turned vp with the Plowe or Hattocke, and layd in bundels
about the rootes of Trees or Vines. Where they haue no store
of Cattell, they vse to mend their ground with Straw & Ferne,
and with the stalkes of Lupines, and the branches layde toge-
ther in some Ditch: hereunto you may cast Ashes, the filch of
Synckes and Hennes, and strawe, with dust and other thinges
raken

raked together: but in the middelt, you must lay some sounde matter against the byeeding of Adders and Snakes: also Humlocks, Malmoort, and the weedes growyng about Willowe trees and Ferne, with other suche rotten weedes you may gather and lay vnder your Sheepe. They that dwell in Grauellie and Heathie groundes, doo take the Turues of the Earth and the Heath, & laying them in heapes powred with a little dounge, suffer them to lye & rotte, and after lay it vpon barren ground, but specially where they keepe great store of Sheepe, they cast into their foldes suche Turues pared from the grounde. Columella countes them but euill husbandes, that haue of euery one of the lesser kind of cattel lesse then a cart lode of dounge in 300. daies, and of eache of the greater sort tenne loades, beside the filthe and dirt of the parde. This is also to be noted, that the dounge that hath lyeen a yeele is best for Corne, for it both is of sufficient strength, and breedeth lesse weedes: but vpon Meddow and Pasture, you must lay þe newest, because it bringes most grasse, and this must be doone in Februarie, the Moone encreasing, for this is þe best tyme to cause encrease of grasse. In the manuring of your ground, looke that you lay most dounge vpon the top of the Hill, for the rayne wyll beare it to the lower partes fast ynough. He that minides to haue his ground beare Corne, if hee meane to sowe in the ende of Sommer, must turne in his dounge in September: if in the spring, he may lay it on at any time all the Winter. What tyme so euer it be doone, you must looke that the winde be Westerly, and the Moone in the wane. This obseruation helpeth greatly to the bettering of the ground. Beside, you must not forget to let the dounge be drye before it be layd vpon the ground. For though Columella doo bidde the contrary, our owne experience willes vs not to folowe hym: for dounge while it is moyst, doth moze harme to the ground then good, as dayly experience teacheth. Now as your land will waxe colde, if it be not dounge, so will it be dyed or burnt, if it be manured peerele, or to much. The wattrie ground requireth moze store of dounge, and the drie ground the lesse.

R I G O. I remember I haue per this scene Earth taken out of the feedes neere adlopyng, and layde vpon the lande, I

E.iii.

therefore

paring of fmg
to be burned
for manure

sheep i loads
ope 2 loads

Olde dounge
best for
Corne, and
newe dounge
for Meddow.

ye none knowe:
first and in
February

The obser-
uing of Wind
& the Moone
in mending
of the ground.
Wet dounge
hurtes the
feedes.

The first booke entreatyng

therefore gesse, the earth may be mended with earth.

Marga

Marle, a fat kind of earth yfed commonly at this day in diuers partes of Suffex and Kent, for the enriching of lande.

Chalker and
Lampshere

Chalke yfed for mending of ground.

Nota

Downing with ashes.

Lande bying by
ye ryner how
it is mended

The maner of plowing.

CONO. The Germanes, besides sundry other sortes of enriching of their groundes, doo in Seade of downing, cast vpon it a kind of pith and fatnesse of the earth: (*Plinie* countes it to be first deuised in Englande and Fraunce) called *Marga*, as it were the fatte of the Earth: but I rather thinke it to bee the inuention of the Germanes, with whom yet both the name and the vse is retained: it is gotten in deepe pittes, but not alike in all soyles. The part of Fraunce that lyes vpon the *Maase*, dooth shewe a sandy kinde of Marle, differing from the fatte Marle of Germanie, but of the same qualitie: whiche caried vpon the Sea in vessels, is solde as a greate marchandize. In some platos the showing of Ponds and Ditches is vfed, to the greate enriching of the ground, in the mountaynie and barren groundes. In some Countreys they make their land very fruitefull with laying on of Chalke, as *Plinie* testifieth of the Burgundions, and the Galloynes. And in Germanie in our dayes, this maner of mending of ground is common. But long vse of it, in the ende bringes the ground to be starke nought, whereby the common people haue a speache, that ground enriched with Chalke, makes a riche father, and a beggerly sonne. A little lower, not farre from the *Maase*, in the Countrey of *Lyeghe*, they mende their lande with a kinde of slate stone, which cast vpon the ground doth moulder away, and makes the ground fatter. In *Combarcie* they like so well the vse of ashes, as they esteeme it farre above any thing, thinking downing not meete to be vfed for the vnholsonnesse thereof. *Columella* writeth, that his Uncle was woont to mende sandy and grauell groundes with Chalke, and chalkie and harde groundes with grauell and sande, whereby he had alwayes goodly Corne. So doo I thinke, that Ruer lande by overflowinges, and fast ground with mudde mingled with sand and grauel, will be made muche better.

RIGO. You haue taught mee sundry wayes of mending of ground, I would gladly nowe learne the right way of plowing and sowing.

CONO. In plowing and orderly preparing grounde for seede, consistes the cheefest part of husbandry. *Cato* affirmeth the

of earable ground and tyllage.

3 theefe² points of good husbandry

the first point of husbandry, to be to prepare the ground well, the second, to plowe it well, and the thirde, to dounge it well. Of plowing and turning by the ground, the fashion is divers, according to the nature of every soyle & country. All great seedes are tyllid with the Plowe and the Share, the lesser with the Spade. The Plowes are of sundrie fashions, according to the diversitie of Countreys, some single, some double, some with wheelles, some without. The partes of y^e Plowe, are the Tayle, the Shelle, the Beame, the Foote, the Coulter, the Share, the Wheles, and the Staffe. The Share, is that which first cuttes the way for y^e Coulter, that afterwards turnes by the Forowe. Where the ground is light, they vse only a small Share. In Lifflande they haue for their Plowe nothing but a Foote. In Syria, where they can not goe very deepe, they vse (as Theophrastus writes) very little Plowes. Plinie writeth, that Wheeles for Plowes were deuised by the Frenchemen, and called *Plugarat*, a Germane name, whiche corruptly is printed *Planarati*. In diuers places where the ground is stiffe, they haue a little wing on the right side of the Coulter, whiche wing is to be remoued to which syde you list: with the Rodde or Staffe well poynted, the plowman maketh cleane his Coulter. When you woodke, your Oren must be poked euen together, that they may drawe more handsomely with heads at libertie, and lesse hurt to their neckes.

The partes of the plow.

Nota for making of the plow

This kinde of poking is better liked of many, then to be poked by the hornes: for the Cattell shalbe able to drawe better with the necke and the brest, then they shall with their heades: and this way they put to the force of their whole bodies, whereas the other way (being restrained by the voke on their heads) they are so greued, as they scarcely race the vpper part of the earth. Where Horses may be used, their vse is more commodious for the Plowe, and the fewer of them the better: for many Horses drawe too hastily, and make too large Furrowes, whiche is not good: whereby we see the ground to be excellently well plowed in Gelderland, and about Colepne, where they plowe alwayes with two Horses, going very softly. In Fraunce and other places, where they plowe with Oren, they make their Furrowes rather deepe then brode. Where the ground is stiffe, the Coulter must

This drawing with the head, is vsed in the vpper partes of Fraunce and Spayne.

Nota

The like is vsed with vs in Norfolke. and Lincolnsyre.

The first booke entreatyng

Gulick

Dead mould.

make little
furrows

must be the greater and the stronger, that it may goe the deeper: for if the crust of the earth be turned vp very brode, it remayneth still hole, whereby neither the weedes are killed, nor the ground can be well harrowed. The Furrowe ought not to exceede one hundred and twentie foote in length, for if it doo, as *Columella* saith, it is hurtfull to the beastes, because they are to muche worried withall: but this rule, where the seedes are large, is not in many places regarded, as in þe Countrey of Salicke, where the seedes are great, their Furrowes are drawn very long. You must not plowe in wette weather, nor wette ground, nor when after a long drouthe a little rayne falling, hath but wette the better part, and not gone deepe. If it be too wette when it is plowed, it doth no good that peece. You must therefore haue a regard to the temperature of your season, that it be neither to drye, nor to wet; for, too much moysture maketh it to durty, and too great drynesse maketh that it will neuer worke well: for either the hardnesse of the Earth resisteth the plowe, or if it doo enter, it breakes it not small yenough, but turneth vp great flakes, hurtful to the next plowing. For though þe land be as rishe as may be, yet if you goe any deapth, you shall haue it barren, which is turned vp in these great cloddes, whereby it happeneth that the bad mould, mixed with the good, peeldeth the woofler Crophe. Where you haue plowed in a drie season, it is good to haue some moysture in your second stirring, which moistning the grounds, shall make your labour the lighter. Where the ground is rishe, and hath long boyue water, it is to be stirred againe when the weather waxeth warme, and when the weedes are full grown, and haue their seedes in their toppe, whiche beeing plowed so thicke, as you can scarce see where the Coulter hath gone, utterly killeth and destroyeth the weedes: besides, through many stirrings, your fallowe is brought to so fine a mould, as it shall neede very little or no harrowing at all when you sowe it: for the old Romanes, as *Columella* witnesseth, would say þe ground was ill husbanded, that after sowing had neede of the Harrowe. Moreover, the good husbā must trie whether it be wel plowed or no, and not only trust your eyes, which (the Balkes being covered with mould) may easely be deceyued, but trie it with your hand

hand) which is a certainer p^{ro}ofe) by thrusting downe a rodde in to the Furrowe, which if it pearce a like in euery place, it sheweth that the ground is wel plowed. If it be shallow in one place, and deepe in an other, it declares the grounde to be euill handled in the plowing. If you are to plowe vpon a Hil, you must plowe ouerthwart, and not vp and downe: for therby the inconuenience of the steepenesse is met with, and the labour of both Man and Cattell is lightened: but herein you must be ware, that you plow not alwayes one way, but sometime higher, sometime lower, woorking a slope, as you shall see cause. Touching the season of your plowing, it must be cheefely in y^e spring, as the Poete well teacheth, *When as the pleasant spring. &c.* For in Sommer the ground is to hard and churlish, and in Winter to fowle and brutie: but in the Spring the ground beyng mellowe, is easely to be wrought, and the weedes are then best turned in, which both doe good for the enriching of the ground, & plucked vp by the rootes befoze they haue seeded, will neuer spring againe. And therefore with vs, we vse to begin to plowe about the middell of Marche: but in sandy and light ground, they vse to plowe in the middell of Winter, if the season will suffer, *Plinia* is of opinion, that stiffe ground also should then be stirred. A slender and a leuell ground, subiect to the water, would be first plowed in the end of August, and stirred againe in September, and prepared for sowing about the twelfth of Marche. The light hilly ground, is not to be broken vp in Sommer, but about the Kalendes of September: for if it be broken vp afoze, beyng barren and without iuyce, it is burnt vp with the Sunne, and hath no goodnesse remayning in it. Wette ground, some would haue broken vp after the Ides of Aprill, whiche being plowed at that time, should be stirred againe about the tenth of Iune, and after againe, about the Kalendes of September, according to *Columellae's* minde. But those that are skilfull in busbandry agree, that after the tenth of Iune, without great stoye of raine, you shall not plowe: for if the peere bee wette, there is nothing to the contrary but you may plowe in Iuly. In the meane time, beware that you deale not with ground ouer wette, as I gaue you warning befoze.

R I G O. May I plowe in the night, if I lyst?

CONO.

Tryall of
good plow-
ing.
The plowing
of a hill.

The best
tyme of plo-
wing.

light hilly
ground

The first booke entreatyng

Nota { Plowing in
the night.

4 fallowes for
some seeds

CONO. Vea very well, in Sommer tyme and in hot Countreys you may begin in the Euening, and continue till the Sunn set, that the moysture and fatnesse of the ground, may remaine shadowed vnder the Clodde: and that the Cattell through ouermuch heate of the Summe, be not diseased nor hurt. How oft you shal plowe the ground that you meane to sowe, partly the nature of the soyle, and partly the condition of the seede will teache you, as when we come to it, I will tell you: for it is not needefull to stirre a grauelly and a light ground, so often as the stiffe ground: yet we find that land, the oftner it is stirred, the better it beares. So that for some seede, you must not onely twyfallowe & threfallowe your ground, but also fourefallowe it, as they vse in the fruitefullest places of Italy and Germanie. In *Misnia* and *Austria*, they plowe but twise. Stiffe ground, as they commonly do in Italy, is best to be sowed bypon the fifth stirring, in *Tuscan*, bypon the nienth. Thus hath euery Countrey both in this, and other matters, his fashion, according to the nature of the ground.

RIGO. But may I not sowe one peece of ground euery yere without resting?

CONO. There are some groundes you may sowe perely, as in Italy and Austria, and like wise in some partes here about the Riuier, that are fruiteful either by nature, or by ouerflowing. In other places you must obserue the olde sayng of the husbände, Take not to muche of your ground. *Virgil* would haue grounde rest euery other yere: which, if you haue store of ground, out of al doubt is best. Hereof had the ground, that is sowed euery yere, his name in the olde tyme: but commonly euery the best grounde requireth rest p third, the fourth, or (at the farthest) the fifth yere. *Karro* writeth, that in *Olynthia* the land beareth euery yere, and euery thirde yere most plentifully. But if you will doo well, you must let it lye euery other yere, according to the nature of the soyle, or els sowe it with lighter seede, that taketh out lesse the substance of the ground, as *Lupines* and others, that we wil shortly entreate of. It is also much to be considered, whether the ground that you plowe be laye ground perely sowed, or fallowe. If you breake up new ground, if it be rather heauie, and prepared for seede, it sufficeth to plowe it once, and to sowe it immediately,

8 best grounde
is to rest the 4
or 5 yere.

atly, and harrow it. If it be light and grauelly ground, you must thypfallowe it, specially at the first breaking vp.

R I G O. Here you speake of diuers tearmes belonging to this trade, I pray you make mee to vnderstand them, before you proceede any farther.

CONO. This arte (as likewise all other) hath certaine woordes peculiar and belonging to it selfe: and because sundry men of good learning haue herein been deceiued, least my matter should be marred with darke and strange tearmes, I will declare the woordes as plaine as I can, digressing a while from my farther speache.

R I G O. I beseeche you hartely.

CONO. We take *Agrum*, a Feeld in our speach, not for a iurisdiction, a Diocesse, or a Shire, as the old Lawiers take it: but with *Iabolenus* & *Florentinus*, we count it a percel of ground, either erable or pasture. *Ager*, *Aruus*, or *Arnum*, we cal earable ground that is to be plowed & sowed. *Varro* would rather haue it called *Aratum* & not *Satum*. The feeld that is called *Restibilis*, is that which is renewed & euery yere sowē, called of the Greke *παλομῶνις* because his fruitefulnessse cōtinueth to y next yere, & yeldeth his Crop euery yere. *Ager Nonalis*, is called of *Varro* y ground that hath been sowed & fallowed: of *Plinie* counted to be sowed euery other peere: with the Lawiers it is counted ground newe plowed, that hath lyeen a peere: we, according to the vulgar speach (for we must speake with the most, & iudge with the fewest) doo call *Nonale agrum*, that which is new broken vp, & hath not before been plowed, wherof commeth *Nonalū Decima*, the tythes of new broke vp land, yet I know there are some learned that count it that, which after his Crop lyes lay. *Vernaclum* is of *Varro* taken for y ground, that in the Spring time is turned vp, and hath been for a while spared. Oftentimes is this also called *Nonale*, both the feelde that hath lyeen a yere, and that whiche is broken vp the first Spring: for thus saith *Varro*, There is great difference whether you sowe in untilled ground, or in that which is yerely sowed, and is called *Restibilis*, or in that which hath lyeen a while, and is broken vp in the Spring. Moreouer, both *Columella*, & *Plinie*, do vse not seldome *Vernaclum*, for ground new broken

Diuers Latine woords belong to husbandry, interpreted,

Agri Voca.

The first booke entreating

broke vp in the Spring, taking their reason of the time, whereby
 νέος, νεομένη νεατός, νεαυσι, may be interpreted by the name of
Vernalis, or *Nonale*. The Feilde is said to be plowed, to be stir-
 red with y^e plowe when it is turned vp: πολειν as *Hesiodus* saith,
 εἰς πολειν θερος δε νεομένη ου σε αποτις, it is broken vp
 whē it is first plowed lying in great Clods: the second plowing
 is called *Offringere Agrū*, or *Iterare*, to plowe againe, εὐπολεῖν
Tertiare to thyfallowe it. *Ager iteratus*, and *tertius*, be vsuall
 wordes wth *Columella* and *Plinie*. *Nonare*, is to chaunge the
 ground wel husbanded before, and to plowe it and prepare it for
 the sowing season. *Occare*, to harrowe it, as *Varro* saith, is so to
 breake it, as there remaine no Clodde. The Harrowe, is an in-
 strument crosse lettused, to breake the Clods withall, and to co-
 uer the seedes. *Cratire*, is likewise v^sed in the same signification.
Attare, is when that which is sowne and come to some growth,
 is turned in wth the plowe. *Plinie* calleth *Ararare*, as it were
Aratrare, to plow often that which is sowne. *Sarrire*, is to purge
 wth the Rake. *Runcare*, is to weede out of the ground noisome
 weedes, for which is also v^sed *Auerruncare* and *deruncare*, and
 of *Columella*, *Exherbare*. *Pastinare*, and *Repastinare*, is to digge
 about the Vines. *Pastinum*, is a forked instrument v^sed in plan-
 ting of vines. *Lirare* & *Occare*, are almost one, where we plow,
 so as we leaue betwixt two Furrowes a Ridge, for the drie kee-
 ping of the graine like a Garden bedde. And hereof is that space
 called *Lira* a Ridge, which the husbandmen call *Porcus*, because
 the place being rayled h^ye, defendeth the Corne from the water,
 and *Lira Hortensis*, a bed in a Garden, *Scamnum*, a Balke, is
 the grosse earth that hath scaped the plowe. *Plinie* willeth, that
 there be no Balkes made, nor great Cloddes remainyng, mea-
 ning the greate Turffe that is turned vp at the firste plowyn^g.
Scānatus Ager, is called of *Vibius Urbicus*, that land which run-
 neth al in length frō West to East, which if it be more of length
 then breadth, and lyeth vpon the North, is called *Serigatus*. The
 land it self is also called grosse & raw, that is not wel mellowed,
 which hath neede to be seasoned wth the heate of the Sommer,
 and the cold of winter, and to be plowed in the Spring. It is al-
 so called rich, fruiteful, fertil: & that which is nought and yeeldes
 not

not his fruite, is called leane, baren, hungry, or bypnishe, αλυσ-
 Αεσα. Also salt, bitter: fermish, where the water stil continues:
 wet, that some tyme lyes drie: Carbunkled, that is burnt with
 the sonne, rotten and mossie. It is also called pleasaunt ground,
 sweete, blacke, rotten, & mellowed, which are the signes of good
 ground: but hercof I thinke I haue now spoken sufficiently.

RIGO. That you may continue your speache, I pray you goe
 to you former matter agayne.

CONO. When you haue broken vp your ground, if it be No-
 ualis as I saide, and not tilled before, you may sowe it presently,
 and harrow it, and if neede be, rake it. The ground that is pere-
 ly sowed, & that hath lyne spare, is to be plowed thise, according
 to the nature of the soyle, and the seede that you meane to sowe.

RIGO. Now you haue tolde mee how to order my land for
 seede, I pray you let mee vnderstande the sortes of seede, and in
 what sort they must be sowed.

CONO. That must I doo. The seede that commeth of that
 which the Latines cal *Fruges*, as Pulse and Corne, we here doo
 call *Fruges*, all sortes of harvest grayne, whiche the Germanes
 call *yuia* and *weia*, because they are geathered in their beautie
 and their ripenes. Iulian the Lawyer, calleth *Fruges* all thinges
 wherewith a man is fed. The auncient writers doo vnderstande
 it more largely, for al the fruites of the earth. Plinie diuides it in-
 to two kindes, into Corne that growes on Care, as Gallus the
 Lawyer defines it: the other that beareth Coddies, as all kinde of
 Pulse, or pebware. Of the first kinde, is Wheate, Rye, Barley,
 Bigge, Otes, Beechwheate, or Bucke, or if you wil in Greeke
 Φρυονυα, Ryle, and Lenten Wheate, though all kyndes
 growe not in all places, nor haue in euery place all one name.
 In some places you haue not Lenten Wheate, cheefely where
 there is plenty of Bigge. In other places they vse neither Otes
 nor Bucke. Of the kindes of Pulse are these, Beanes, Peasos,
 Lentiles, Chiches, Cares, Lintels, Lupines, and suche like.
 And though there be sundry sortes of seede, and euery Countrey
 hath his kinde, and sowes such as best agrees with their nature:
 yet generally this is to be regarded, that you sowe none that are
 olde and dyped, but the newest, for olde seede dooth oftentymes

Of seede, and
 their diuersi-
 tie.

round growing
 by the dale

round to dole
 beane riddes

Olde seede,
 not to be
 sowed.

ye must

The first booke entrearyng

as they wyte, change their nature: as the seede of Colwoortes, that being sown, turneth to Rapes, and Rape seede like wise into Colwoortes. The seede of the first yere is best, of two yere olde woorse, and of thre, woorst of all, the rest is barren and rough. The best seede also is that which is waichtiest, and lieth in the bottome, and such as is full, and being broken hath a good colour: such as is wrinckled, and thinne in the eare, is to be thowen away. There is also another necessarie note, to haue the seede from strange ground, & from the woorse to the better, and not the contrary, nor from colde Countreys into hotte, nor from the forward to the slowe, and to be ware that it be not bittē with Birdes, Hise, or Antes: and to prosper the better, sprinkle them before they be sown, with the iuyce of Houslecke. If you mingle with your graine the seede of Bearefoote, and sowe it about your ground, you shal saue it from the annoyance of Birds.

The order of sowyng.

You must sowe your ridges with an equall hand, *καὶ ὁμαλῶς*, and all alike in euery place, letting your foote (specially the right foote) & your hand go togeather: Wheate, Rye, Barly, Otes, & other, chesely such as beare Cods, as *Milium*, & *Panicum*, must be sowē with a ful hand, but Rape seede only with three fingers.

RIGO. A man must vse his hand I perceaue, as the Harper dooth, to make it perfitte.

CONO. Wee must in deede. And as we put more water to stronger wine then we doo to small, and lay the greater burden vpon the stronger man, and some stomacke requires the stronger foode, so some ground may beare muche seede, and some away with lesse: neither can it be certaynely appoynted, howe muche seede is generally to bee caste vpon an acre: though I knowe the olde wyters appoynted ceatayne quantitie to euery acre, whiche perhaps might serue with them: but wee shoulde foule deceaue our selues, if we shoulde obserue the like in euerie place. First, because some grounde requireth more seede then other, as the ground is of stiffenesse or lightnesse: for the stiffer ground (as in Hollande neere the Rhine) requires muche seede, where lighter ground requireth lesse. The tynely sowing, the thinner: and the latter, as *Columella* sayth, the thicker. Secondly, their measures & acres differ, as the thing that at this day is

not

Best seede is waichtiest

take yo seede from a woorse ground

Rape seede must be sowed bene himme only wth 3 fingers

& byshall for folio 30. De 32

not thoroughly agreed vpon. But now you shall heare what seede euerie ground requireth.

RIGO. That I long to heare.

CONO. After long rest, or the first dounying, either Barley or Wheate is to be sowen: but Wheate, though it require good ground, yet if the ground be to riche where it is sowen, it will growe to ranke, and lye leadge vpon the ground. And therefore vpon suche ground, it is beste to sowe your Wheate after a crop of Barley, Pease, or Bucke, and after your Wheate crop, to sowe it with Rye: and then againe (if the ground were not poore) with Barley. In very riche ground, immediately after the geathering of Rape seede, plowe it presently for Bucke, where by you may haue two Croppes in one yeere. In like maner the Cabedged Rape sowen after Rye, maketh two haruestes in one yeere. Pease, Beanes, Tares, and Fitches, and almost al Pulse els, requireth riche ground, whiche after wardes may yeerely serue for Wheate, Milum, and Rape. Plinie would not haue Rapes sowen, but in verie well dunged ground: but we finde by experience, that after a croppe of Rye in meane ground, you shall haue the same yeere greate Rapes. Sandy and Grauelly ground, must rest euerie third yeere, for two or three yeeres, that being then wel dounyed, you may sowe Rye, or Buck, and after Dates. In good pasture ground new broken by, you may sowe Dates after the first plowing, after that, Rape seede, then Barley, after that Wheate, or Rye, & at last Dates, or Rye, if the nature of the countrey be for it. When this is doone, you must eyther douny it, or let it lye laye. If the ground be mellowe, after Barley in some places they sowe Millet, then Radish, after that Barley, and Wheate, as in Campania: and such ground is sufficiently plowed, when it is sowen in some place where Lenten Wheate is sowen, it restes three monethes, and after is sowen with Beanes in the Spring, in no other wise may you charge in different ground. If after two seasons of Corne, you sowe Pulse or Bedware, the barrenner ground must rest three yeeres. Some wil in no case haue you sowe Wheate, or Barley, in ground that lyes fallow. After that ye haue thus sowen your seede in ground thys plowed and well prepared, then must you straight wayes

D. J.

harrowe

Harrovyng.

Barley to be sown
after long rest
or the first doun
ying.

Buck quid?

Rape and Buck
two copped in
one yeare
Rye & Rape.

in meane ground
Rye & Rape
in one yeare

Rakyng.

Rowling.

The tyme for
fowyng.

harrow it, which is doone with a lettused instrument ful of teeth
drawen vpon the ground, whereby the Cloddes are broken, and
the seede couered: in some places it is doone with a boord tyed
to the plowe, which they call in Latine *Lirare*. Sometime Ra-
king is needefull, whiche in the Spring, looseth the earth made
clunged with the cold of Winter, & letteth in the fresh warmth.
It is best to rake Wheate, Barley, and Beanes, cypse. More-
ouer, they breake a sunder with the Roulcr the greater and stif-
fer Clods. Weeding is when the Corne is knotted, the nough-
tie weedes being plucked vp, deliuereth the roottes of the Corne,
and seuereth it. To speake of the season of Sowynge, it is agreed
vpon of al men, that there ought to be no sowynge in Winter, for
the Winter Corne when it is sowed before Winter, appeareth
about the ground sometimes within a seuennight after, which if
it be sowed after Winter is begonne, it scarcely appeareth in
fourty daies after. Some very fondly thinke it better to sowe in
the Spring, then in *Autumne*. Plinie writeth, that in *Trenes* &
Haruest being in, they haue sowed in the coldest of Winter, and
rakyng their grounde in the Spring, haue had an excellent good
Crop after. Amongst our haruest seedes, there are some harder
that are able to abide the winter, which are sowed in hot Coun-
treys, as *Virgil* saith, about the setting of 7 seven starres, which
Columella vnderstandeth to be about one and thirtie daies after
the *Autumne Equinoctial*, that is, the nieth Kalendes of No-
uember, and in Fraunce and Germanie in September, and the
beginning of October, as Rape seede, Wheate, Rye, Winter
Barley, that are nourished in the blade all winter, and grow vp
towards earing in the Spring. Some there be that will you to
sowe before, onely in drye ground and hott countreys. Some
againe would haue you sowe in colde Countreys after the *An-
tumne Equinoctial*, in hot countreys later, least they should flo-
rishe before the winter, and be destroyed of woozmes, or blasted.
Some on the other side make haste, saying, That soone sowynge
sometimes deceaues, but late sowynge, euer. It is good reason to
sowe timely in wet groundes, that the seede rotte not with ouer
much moysture, and later in drye groundes, least lying long and
not sprouting, it come to nought. Also, in timely sowynge, to sow
thicker,

winter barley
quid?

Nota Late sowynge
alwaies fay-
leth.

thicker, because it is slowe in rooting, and in latter sowing, thinner, least with the thicknesse it bee choked. Sommer seedes, which are sowed before the rising of the seven starres, and in the Spring, as Beanes, Pease, and such, Pulse, Millet, Panicum, *Sesamum*, Sommer Barley, Flare, Hemp, Dates, Buck, *Sporia*, and suche other, are sowed in the Spring time. In *Asia* and *Greece* they sowe all as they say, at the setting of the seven starres. Now, although there be certaine preceptes of the tyme of sowing, and howe much seede is meete for euery quantitie of ground: surely, they might as I haue saide before, for theyr owne countrey and nature of their ground, geue a kind of gesse: but to determine any thing herein certainly, there is no man that can doo it, but the ground and euery mans owne practise is herein the best maister. One auncient generall rule of husbandry there is, wherein we are warned in cold Countreys to sowe late, in temperate Countreys sooner, and in hot regions soonest of all. *Eratosthenes* saith, that *India* is subiect to much raines in Sommer, and that then they sowe Flare, *Sesamum*, Ryle, and Millet: and in Winter, Wheate, Barley, Peaware, and other fruites that we haue not. *Hesiodus*, the Prince in his time of husbandry, wyls vs to sowe accordyng to the custome of Grece, his naturall contrey. *Virgil*, *Cato*, *Varro*, *Columella*, & *Plinia*, apoint their rules for Italy, whose mindes if you will haue folowed in all other places, you shall but seeke to couer euery pot with one couer. But to come to the matter, lithe the seedes of sundry natures, require sundry tymes of sowyng, and diuers sortes of ordering, and that herein euery Countrey hath his guise, I will here) obseruing such customes as are most generall to them all) seuerally shewe you of euery seede by hym selfe, and so declare vnto you the order of their sowyng. And first, amongst all the fruites and graine that the Earth dooth yeld for our sustenance, the chiefe place is rightly geuen vnto Wheate, called in Greke *ωρεός*, in Italian *Grano*, in Spanish *Trigo*, in Dutch *Weyss*, in French *Fourment*, as a graine most needefull for man, and therefore moste fruitfull, because God hath ordayned it to nourishe man withal. It is wonderfull what yeld it hath been of in some Countreys. *Augustus* his deputie sent him from *Bisaice* in *Africa*,
D.is.

Sommer
grayne.

A generall
rule, fo be
noted

Wheate

The first booke entreatyng

150 bushell of *frica*, of one grayne of Wheate foure hundred branches. And *Plinie* witnesseeth, that in the same place, one bushell hath yelded unlike for one hundred and fiftie bushels.

RIGO. There are that holde opinion, that this whiche the common people call Wheate, the Germanes *Weyss*, and the Hollanders *Terne*, is not the true Wheate, but a kinde of Rye, and that the true Wheate which the Italians call *Grano*, groweth onely in Italy and in Spayne.

CONO. That which growes in Italy and Cicil at this day, differeth not from ours in fashion, colour, nor flowre, though the grayne there be somewhat great, and the flowre more clammy, whiche maketh it that it can not be long kept, specially about Rome. And whereas our Wheate is either bearded or pollarde, theirs is altogether pold: we call it pold or pollard, that hath no Aanes vpon the eares. And that we call the Aane, which groweth out of the eare like a long picke or a darte, whereby the eare is defended from the daunger of Birdes. With *Virgil* the Aane is vsed for the Corne, as the parte for the whole. *Gluma* is the huske of the Corne whose top is y^e Aane. *Fru* is the small graine lesser then the corne that growes in the top of the ripe eare. To returne to the Wheate, I graunt there are some that doubt of this Wheate of ours, such hath beene the iniurie of the tyme (as all thinges almost forgotten) we scaslily knowe howe to name the foode that we dayly feede of. For my part, I wil follow common vse as a maistresse in speache. The old writers haue written of sundry sortes of Wheate, whereof they haue thought that most needefull to be sown, which they called *Robus*, as the sayrest and waightiest. The second called *Siligo*, thei vsed in their finest Cheate. The third, they called *Trimestre*, because it woulde be ripe in three monethes after the sowyng. Though *Columella* allow no such kind, yet was it most auncient with the Greekes, and called *Trimenon*, growyng only in the colde countreys. In *Thracia* they haue a kinde that is ripe in two monethes, and is couered with a number of huskes, against the extreme cold of the Countrey. In our Countreys also we haue Wheate and Rye, that we sowe with our Sommer grayne, as wee likewise doo Rape seede, but to no great commoditie: for the Winter seedes

to

too farre exceede them, and being nourished in the earth all winter, they proue, as *Theophrastus* saith, of more substance & profite. Amongest all these sortes *Plinie* recounteth the wheate of Italy to be the best, both for beauty and twaight. The vse with vs only two sortes, differing in this, that the one hath smooth eares without any beards, the other with long beards or Aines, very ruffe and sharpe, not much unlike to Winter Barley: in al other properties they are both alike. It is sown in September, the season being fayre, the ground thysle plowed and well raked or harrowed, although you may sow it very well after once plowing upon ground where Pease, Tares, or Buck hath been newly had of, in a good soyle. *Plinie* and *Columella* would haue you sow of Wheate and Rye, five bushels vpon an acre: but as I haue saide before, this measure is to be measured by reason. The at this day sow not so much Wheate vpon an acre as Rye, nor so much Rye as Barley. It is best, if the Winter be like to be cold, to sow the sooner: if warme, the latter. Wheate delighteth in a leuell, riche, warme, and a drye ground: a shadowy, weedy, and a hilly ground, it loueth not, though *Plinie* say the hil yeldeth harder Wheate, but no greate store. After it is sown, it putteth out a great company of small rootes, and appeareth at the firste with one blade: it hath sundry stalkes, but such as can not branch all the Winter, as other Winter Corne is, it is nourished in blade: when the Spring draweth on, it beginneth to spindole: vpon the thirde or fourth ioynt thereof, commeth out the eare, which first appeareth enclosed in the blade, it flowreth the fourth or fifth daye after: if it growe to rancke at the firste, it is eaten downe with cattel, or in some place mowed: it is after weeded, it flowres about the tenth of June, sooner or latter, as the yere fallis out, euen at one time almost with y^e vine. two or thre floures with comfortable sauour flourishing at once. *Varro* affirmeth, that the Wheate lieth fiftene dayes in the blade, flourisheth fiftene, and ripeth fiftene: after it hath flowred it waxeth greater, & as *Theophrastus* saith, is within fourtie daies after full ripe, where with the latest they reape in the eight moneth. Other say in sixe and thirty daies, & reaped in the nienth moneth. It neuer eares, till al his ioyntes or knottes be grown. There are foure iointes

The tyme for
Wheate sow-
yng.

The first booke entreatyng

in Wheate, as *Plinie* saith, and eight in Barley: but in our countrey & our dayes, both Wheate, Rye, Barley, and Oates, haue but foure, and that not alwayes. Before the full number of the ioyntes, there is no appearing of the eare: whiche when it cometh, becometh to flowre within foure or fve dayes, and so many, or little more, it sadeth. When the flowre is gone, the graine begins to swell, and in foure or fve dayes after to ripe. The blade of the Wheate is somethyng like a Sedge, but narrower then the Barley: the Spindell, Stalke, or Strawe thereof, is smoother and gentler, and not so brittle as of Barley. It is closed in many coates. The stalke that beareth the eare is higher then that of Barley, the eare groweth more vpright and farther from the blade, the chaffe is softer, sweeter, and more full of iuyce, the eare of Wheate is out of order and vneuen, as well of the Dollard as of the bearded, where as Barley hath his eare of iust number and in perfect order. In *Bactria*, it is sayde a graine of Wheate is equall in quantitie to an eare of our Wheate. In *Babylon*, the blades both of Wheate & Barley, as *Herodotus* reporteth, are foure inches brode. Wheate as *Columella* wytteth, after þ third sowing chaungeth to Rye, which hath been knowen in *Germanie*, as I said before, in many places. Of wheate is made *Amyl*, the making wherof *Cato* & *Dioscorides* teacheth. After Wheate we sowe with vs Rye. There are that thinke it to be that which the Greekes call *ἀνεια*, though *Homer* take *ἀνεια* for a kind of foode for Horses: some others take it for a kind of Wheate, *Herodotus* saith, Bread was made of it. Of *Laurentius*, it is called *Far*, of *Gasa*, *Siligo*. Diuers learned men call it *Secale*, & take it for *Plinies* *sarrago*, the Frenchmen call it *Segle*, the Dutchmen *Rock*, the Italians almost as the Latines *Segala*: the graine is somethyng blacke, and maketh blackish bread. But to passe ouer al controuerlies, I folowe the Countrey speach, and take *Siligo* for our common Rye which is sowed immediatly after wheate, about the ende of September, or in the beginning of October, in good ground: in sandy and grauelly ground, it is sowed in February, and called *Sommer Wheate*: it requireth the beste ground, warme, and fast, and refuseeth not light ground and grauelly, so it be helped with doying: it loueth wet ground as ill as Wheate,

Starch.

March Eid

Wheate, they both require to bee sowed in a deepe mould and a plaine soyle: but Rye is sowed a little after Wheate, in the sowynge whereof, you must occupie a thirde part more then of Wheate: it prospereth lightly in any ground, and many times with the peele of a hundred for one. It must bee sowed after the thirde plowing as wheate & harrowed much after the same sorte, the stalke or steale therof, is smaller then the Wheate stalke, taller, and stronger, his eare hanging downe wardes, and therefore more subiect to blasting, because it receiveth and kepeth the water that fallies while it floweth, and suffereth the violence of mystes and frostes: the strawe thereof is gentle and flexible, serving for Chines and coveringes of houses. Now foloweth Barley, accounted in the olde generations among the woorthiest sort of grayne, and not of small estimation at this day. The Italians call it *Beade* or *Beano*, or *Orzo*: the Spaniards *Cenada*: the Dutch men *Gerst*: the Frenchmen *Orge*: the Grecians *κριθη*: & though it be used in Greeke & Italie, and such warine and fruitefull Countreys for cartels fodde, as *Homer* also witnesseth, yet in the Northerne Countreys it supplies the place both of Bread and Wine. There are of it two sortes *Hexastichon* and *Polystichon*, whose eares are three, foure, and sometimes six square, and divers eares springing from one grayne, every eare containing aboute fourescore graynes, so woonderfull are the gyftes and blessings of GOD. The other sorte is called *Dystichon*, having in the eare but two rankes or orders only. Againe, there is one kinde of it to bee sowed in Winter, an other for Sommer. The Winter Barley is of better peele, but it is soone hurt, specially with much wette and frostes folowynge. There is nothing more hurtfull to Winter Corne, specially Barley, Rye seede, and Rye, then the wette of Winter, mipped with often frostes, and after a warine that to be presently frozen againe: both the sortes of Barley require ground that is very ritche. Winter Barley after two or three plowings, is to be sowed in September: Sommer Barley in March, or April, after twyse plowing: and many tymes, necessitie forcing, after once plowing: in the sowynge, you must occupie more seebe by halfe, then in sowynge of Wheate: it requires a mellowe and a fatte ground, and therefore

Barley.

Rape seede may
not abide the
wete of winter
nor to be mipped
wth often frosts

quere quind fit
winter barley

The first booke entreating

Barly

Good barly is
ripe in 7th
monthes.

is best sowed, where the ground is most manured. The winter seede flowreth in May, and is ripe in June at the furthest. This kinde was not wont to be sowed in these partes, but great numbers now, mooued by my example, doo vse and receiue great gaynes by it. The Sommer Barly in many Countreys is ripe and redy in three monthes after y^e sowing. In *Aragon* as *Plinie* writeth, it maketh double haruestes every yere. The seventh day after it is sowed, it commeth vp, and one ende of the seede runneth downe in roote, the other, that sooner springeth, commeth vp in blade: the greater ende of the grayne maketh the roote, and the slenderer the flowre. In other grain the roote and the blade spring both from one part, the blades of both kindes are russe. It must bee geathered with more speede then other graynes, for the strawe of it is verie brittle. Of Barley is made, as *Dioscorides* writeth, both Bere and Ale.

RIGOR. I like your Beere you haue excellently well, I pray you tell mee in what sort you make it?

CONOR. I will not hyde my cunnyng in this matter. Wh^{er} Barley is first steeped in a Sestorne of water a day or twoo, if it be Winter seede it is harder hulled, and requireth the longer watering. The Sommer grayne is thinner, and requireth a lesser time. When it is watred, I drie it vpon a floore or a heele, till it swell & breake, putting out as it were litle beades or theedes: if it be layde thine, it will in Sommer, specially in March, drie and breake of it selfe without any fyre. You must take good heed that in synowting it open not to much, and loose his flowre. This being doone I grinde it, and put the meale into a Bash of attre, whereunto I put my licour sodden, and after let it seeth three or foure times, adding vnto it, both for holsomenesse and taste, the flowre of the Hoppe: after this, I put on Peest, and set it a working, and then cleanse it. The more it is cleansed, the holsomer and cleerer it is: that whiche commeth of the spurging, is kept both for brewing and baking: the drinke will be the better, if you put to it a fourth part or sixth part of Wheate: the more Corne you lay on, the pleasaunter and better coloured will your Beere be. Your greatest care must be to see it wel sodden, wel cleansed, and well boypped, otherwise Baste of it selfe will soone corrupt.

Obseruing

Alita.
potigan.

Observing this order, your drinke shalbe both holtsome and pleasant: that endureth best and longest, that is brewed in *Darche*. There is made of Barley *Alica*, a reasonable good meate, and *Peisan*. Now they must be made, you may reade in *Plinie*. Next to Wheate and Barley, foloweth *Zea*, which the common people both in Italy, Spaine, & Flaunders, call *Spelta*: the French call it *Espeltra*, with *Homer* is greatly commended *Ζῆα* & *αραρα*, the feedes that beareth the *Zeam*, being as *Galen* sayth, the meane betwixt Wheate & Barley, for he hath the qualities of each of them, and is of two sortes, the one in stalke, joint, and eare, like to Wheate, & carieth in euerie huske two feedes, and therefore is called *Ακονυ*, the other hauyng both stalke and eare shorter, and but one grayne in euerie huske, growing in two rankes, and in the toppe resembling Barley with his sharpe haues. In Italy, specially about *Mirandula* and *Concordia*, it is used in prouender for Horses, it is not in these Countreys in vse. I would sow it here, sith the ground will serue for it, & that both bread and drinke might be made of it very well, but that it is somethyng troublesome to grinde, because of the double huskes. It despyeth a moyst ground, riche and good, it is sowed, after the same maner that Wheate is sowed, in September or October: it flowreth in June, and is ripe in July, very meete for cold Countreys, because it can abyde frost and stormes.

R I G O. There is (as I remember) a kinde of Wheate called *Far*, the auncient people called it *Adoreum*, that groweth in many Countreys. Far. Adoreum

CONO. You say true, for with the old sort *Far* was a general name to all corne, as wheate *Far*, Barley *Far*, and Rie *Far*, and when Milles were not yet deuised, they did beate their Corne in Morters, whereof came, that the Meale was called *Farina*: yet after, was the name of *Far* only geuen to *Adoreum*, though *Columella* called it alwayes *Far Adoreum*, makyng foure sundry sortes of it. The Frenchmen call it *Brance*, the Italians *Sandala*, the Spaniards *Escandia*, the common people of our Countrey call it *Farro*, the Dutch *Keskorns*, whose graine is very like Wheate, but that it is shorter and thicker, and where Wheate hath a chist, there hath it a rising: it is heavier then Barley, and lighter

The first booke entreatyng

lighter then Wheate, it peeldeth more Meale then any other corne. The people of Rome as *Plinie* saith, liued with this corne at the first three hundred yeeres, it groweth in Egypt without Aane, with a greater care and a waightier, it hath in the stalke seuen iointes, & can not be cleaused, except it be parched. Fraunce hath two sortes therof, one of a reddish colour, whiche the people call red wheate, the other whiter, which they call white wheate, the care is threesquare, not vnlike to spelt. In Italy they make pottage of it for their labourers. For of *Adoreum*, *Virgil* would haue sowed before the setting of the seuen starres, after the *Equinoctiall* of *Autum*: but in wet and cold barren groundes, it is best to sowe it about the Kalendes of October, that it may take deepe roote before the freezing and cold winter, It is sowed in low groundes, watrike, and chalkie: after it is sowed, it must bee harrowed, raked, and weeded: the raking looseth in the Spring, the heauie shactes of Winter. In raking or harrowyng, you must take heede, as I haue said before, that you hurt not the rootes: weeding when it is knotted, scuereth the Corne from all annoyances. The Frenchmen sowe it in hollowe Furrowes, because it is very subiect to blastyng, thinkyng thereby to preserue it both from blast and mildew. To sowe it in hie ground is discommended, though it prospereth there well yenough, because cattell can not away with it, for the sharpenesse and rustenesse of the eares, and because it requireth great labour in getting of the huskes, which if it be not cleared of, is neither good for man nor beast: the vncleane Chaffe dooth hurt with the Cough the Cattelles lunges. Amongest the Winter seedes, Rape seede dooth challenge his place, whiche I take to bee the seede of the Rape which *Plinie* maketh for his third kinde, and wilde, whose roote, like the Raddish, runneth in length, the leaues bring russe like the other kindes, and the stalke bushy and full of branches: the roote of it is good for nothyng, but is onely sowed for the seede, whereof they make oyle seruing for poore mens kitchins, fastes and lightes, specially in Germanie where they want the oyle of Oliues, wherby ariseth great gaires to the husbandman. In the hot Countreyes where they haue other oyle yenough, this seede is of no vse but in feeding of Byrdes: it is sowed in the ende of August,

Rape.

Rape oyle is
good for y^e blynde
fastes, & lightes
by Lampes.

August, or the beginning of September: howe be it, sometime it is sowed in Marche among the Sommer feedes, but to nothing so great a profite: it is cast into very riche grounde or well manured, thysle plowed and well tyllid, it must be sowed very thynne: for being a very small seede, it must not be sowed with the full hand as Wheate is, but onely with three fyngers: it flowreth in Marche or there aboutes, as the peere forwarde, and continue with his flowring a long tyme: the flowre is yellow and very sweete, wherein Bees doo muche delight: as soone as it hath left flowring, it is presently ripe, it groweth two cubites in height bearyng a plentifull seede in little small Coddess, it rendreth for one bushell, a hundred bushells of seede. Witherto haue I spoken of Winter feedes, now we must I tell you of such as are sowed towardes Sommer.

R I G O. Will you speake nothing of the Rape roote whiche is greatly occupied of the husbandman, and not to be despised as a thyng that groweth in greate quantitie, and is meetely good meate both for man and beast.

CONO. The Rape is named of the Greekes *γογγύλη*, in Italian *Rapo*, in Spanishe *Nabo*, in French *Rauen*. The ordering of which, though I tooke it to belong to the garden, wherin you are able to say more then I, yet because you require it, and that sometime the husbandmen doo plant them in their feedes, I will tell you as much as I know therein. There are two kindes of them, the firste dooth roote all in length like the Radishe, whiche in many places of Germanie is bled for a dayntie meate, the other either groweth in great roundnesse, or els very flatter: they are nourished with mystes, frostes, & cold, three monethes together, and growe to an exceddyng greatnes. Plinie writeth, that he hath scene Rootes of them that haue weyghed fourtie pound. Some say, they haue scene of them that haue weighed an hundred pounce. It is woonderfull, that of so litle a seede should come so great a roote. The Greekes make two kindes of them, the male and the female, both comyng of one seede, the male when it is sowed thicke, and the female when it is sowed thynne. There are two seasons for the sowynge of it, either in Marche, whiche myll be ripe about the tenth of June, or in July or August,

Rape seeds
must be sowed
thin, wth 3
fingers, & if
flower is good
for bees.

100, for one.

44 or 50

two times for
sowing of Rape
in March and
July

The first booke entreatyng

gust, after the first plowing, commonly vpon the ground where Rye and Winter Barley haue been newly had of. It is thought they are the sweeter by lying in the ground all Winter, when as the encrease is not in the leafe, but in the roote. They are also sowed (as *Plinio* writeth) in hotte and moyst Countreys in the spring, and wil the better encrease if they be sowed with Chaffe, who would also haue the sower naked, and in casting the seede, to wishe good lucke to hym selfe, and to his neighbours. They are preserued from the Caterpillar, whiche commonly consumeth the young leaues, by mingling the seede with Soote, or stee-
pyng them all a night in the iuyce of Houselecke: *Columella* as-
firmeth, that he himself hath seene it proued.

R I G O. Nowe proceede (I pray you) with your Sommer seedes.

C O N O. The Sommer seedes are almost all such as are ripe within thre monethes, or foure at the vttermost after they are sowed, and some of them sooner, if the ground and the weather be good. Among the sommer seedes we wil first talke of graine, and after of pulle. Of the grayne, Dates are the first that are sowed, though *Virgil* count them barren, and *Plinie* counteth them rather weedes then Corne, affirming that Barley when it prospereth not, will many tymes turne to Dates: yet the Frenchmen and the Germanes count it (at this day) the best prouender for Horses, and foode for Cattell. *Plinie* also witnesseth, that the Germanes vsed to make pottage of Dates. And *Dioscorides* maketh mention of Dater pottage. *πότης ἐκ ἐλάου γινέται*, pottage or gruell is made of Dates, it is called of the Greekes *ἐλάου*, in Italian *Vena*, in Spanishe *Auena*, in French *Auoyne*, in Dutch *Hauer*, which though it growe not commonly in Italy, yet vpon monte *Ficelto*, & in the kingdome of Naples about *Siponto* it is founde. We haue amongst vs two kindes of them, one full & weighty, seruing in deere yeres to make bread & drinke of, specially if it be meddled with a little Barley, and this kind prospereth in rich and newe broken vp ground exceedingly. The other kind is lighter, which the common people call *Owen* and *Brunhauer*, it is very light, and yeeldeth but little flower nor foode, it groweth vpon sandy & barayne groundes, and ser-
ueth

Chaffe

Soote

Dates.

ueth well for Cattell and for Horse, both the kindes haue bullshy toppes, from whence hangeth the seede in like wise, resembling the Grasshopper: the flowre of it is white, and frō one grayne, there springeth diuers stalkes. With *Dioscorides*, *Bromos* is a kind of Dates that resembleth wheate in the stalke & the blade, and groweth like wild wheate. *Theophrastus* calleth it ἀρύλοτα. The Date is not daungerous in the choyse of his ground, but groweth like a good fellowe in euery place, where no seede els will growe. Of the like disposition almost is Buck or Beechewheate, vnknowen to our olde fathers. It is called φαγόπυρον, Beechewheate or μελάμπυρον Blackwheate, though μελάμ-
φρον signifieth an other graine. I had rather cal it Bechewheate, because the grayne thereof is threecorned, not unlike the Beech-
mast both in colour and fourme, differing onely in the finallnesse.
 The stalke is very great, & straked like to the greater Fearn: It hath many branches with a bullshy top, a greate sort of white flowres in a knop, like the flowres of Elder: it flowreth long to-
 gether, and after appeareth the grayne, first white and gree-
 nish, in shape threecorned: after they be ripe the colour chaun-
 geth to blacke or brownish like a Chestnutte. This graine hath
 not long since ben brought from Russia & the Northerne partes
 into Germanie: now it is become common, and bled for sattu-
 ing of Hoggres, and serueth the common people in deare seasons to
 make bread & drinke withal, it may be sowed in any ground how
 badde so euer it be: howbeit, it dooth best in good ground, and is
 sowed in Aprill and in May, and in Iune, after the reaping of
 Rape seede. You must sowe lesse of it vppon an acre by a fourth
 part then of Wheate or Rye: it is much bled to be sowed vppon
the ground where Rapes growe, wherby the ground doth yeeld
a double Crophe in one yere. When it is sowed, it commeth by,
 if it be moyst weather, within foure or fve dayes after haupng
 two leaues at y first appearing, not much unlike to Purcelame.
 Amongst the Sommer seedes is also receiued Sōmer Barley,
 which from the Sommes entring into the *Equinoctiall*, till the
 end of Marche and Aprill, is sowed, and is reaped againe for the
 most part in thre monethes, or at the vttermost foure. It requi-
 reth (as Winter Barley dooth) a riche and mellowe ground,
 and

Buck. Quere on
 French wheate

Buck

Sommer Bar-
 ley.

The first booke entreating

Myllet.

and to be sowed after twyse plowing, though sometime for necessity it is sowed after the first plowynge. And though it yeelde not so good nor so perfect a grayne as the Winter Corne dooth, whose graine as *Theophrastus* writeth, is farre more perfect and of stronger substaunce, bringing greater strawe and weightier Eares, yet because it is harder husked, and the Sommer seede more fyne and gentle, is therefore of most men desired, and counted to yeelde more flowre then the Winter grayne: some againe prefer the other Millet, called in Latine *Millū*, in Greke *κρυζανθον*, in Italian *Milio*, or *Miglio*, having as it were a thousand graines in a Ear, as *Pestus* seemeth to auow, in Spanish *Mijo*, in French *Millet*, and in Dutch *Hyers*, where they make pottage of it & bread. The Russians & Moscouians are chiefly nourished with this kind of pottage, whiche they make with the flowre mingled with milke, & the blood that they let from their Horses. The men of *Ind*, as *Plinie* saith, knowe no other graine but Barley and Millet, which grew in his time plentifullest in *Cāpania*, it is the best leauen that may be made, neither is there any grayne comparable to it for weight, that more increaseth in baking: for of one bushell hath been drawen threescore pounce of bread, and a bushell of sodden meate, made of three quarters wet and vnsodde. It is sowed at this day in every place, though very little in y^e lowe countrey, it groweth with a stalke full of ioyntes a cubite high, a leafe like a Reede, a round and a small seede hanging downe in long rimmes with many tops, it groweth sometime seven foote high, it delighteth in a watrishe moorie ground, and in grauell, so it be now and then ouerflowen, it hateth drye and chalkie groundes. Some geue counsell to sowe it first in a colde and a wette ground, and then in a hotte ground: before the Spring you must not sow it, for it delighteth much, in wynch. A little seede of it, is sufficient for a great deale of ground: if it be sowed thicke, it comes to nought: a great handfull will serue a whole acre, wherefore in raking, you must rake out what is more then needefull: an acre beareth fourrie bushels, if it be wel sowed, every seede yeeldeth about a pottell. It is forbidden to be sown among Vines or fruite trees, and must continually be weeded and raked. When the eare is full grown, it must be gathered

Nota.

thered with the hande, and dyled in the Sunne, least the whot weather shatter the seedes. This grayne may very long be preserved, for being well layde by where the winde can not come, it will well laste an hundred yeere. There is an other like grayne that they call Indian Millet, with a great grayne, and a blacke and big reedy stalke, whiche was first brought into Italy in the raigne of Nero, whiche (as *Plinie* saith) was called *Loba*, where as *Loba* are rather the Eddes of all pulse, & *Phoba* the manes and toppes of Millet, as it appeareth by *Theophrastus*. *Panicum* is called of the Greekes *ἔλκυρος*, of the Dutch *Pfennich*, or *Heidengreiss*, of the Italians *Pannaco*, the Spaniards *Panizo*, the Frenchmen *Paniz*, so called of the little Pannicles wherein the seede lieth. It commeth by like Millet, with many leaues and flippes, glittering with a reddishe busshy top, full of seedes like Mustards seede, some yellowe, purple, blacke, and white: it must be ordered in all things almost as Millet: beyng sowd in Sommer, it is ripe in fourty daies after: in other places sowd in May in wet ground, it is to be gathered in September. The haruest and the vse of it, is almost all one with Millet, neither can it as Millet be sined without parching, when it becommes to spindel, it must be well weeded, least the wedes ouergrowe it: being well drest with Cheesyl and Milke, it maketh indifferēt good meate, in bread it is not so muche vsed as Millet: for the bread is verie drye, and croonbleth like Sand or Ashes, beyng altogeather without moysture or cleaupng: but the common people remedying that with Larde or Dyle, doo make a shift with it as well as they can. They that dwell about *Pontus*, are sayde to esteeme it aboue al other foode, as the people of *Nanave* doo at this day. In many Countreys it is vsed onely to feede Pigeons withall. Of the number of outlandish graine, is Rysse, in thare as *Theophrastus* saith, lyke Darnell, haupng a busshy toppe lyke Millet or Pannicle, but no Care: his graine is like the kind of Barley called *Zea*, the leaues are thicke lyke leaues of Leekes, but broader, the stalke a cubite hie, the floure purple. This graine is but geason in Fraunce and Germanie, but in Italy and Lumbardy comon, where it is called *Etriso*, & *Menestro Del riso*, & Frenchmen leauing the first letter, doo call it *Rison*, the Greekes *ῥίζον*, the

Panicum.

Kysse.

the Spaniards call it *Arrofs*, *Plinie* supposeth it to be engendred of the water Sedge. There is made of it Furmentie, as *Horace* calles it Rysse Furmentie. It is sowed in Marche, as Millet and Pannicle is. The Indians (they say) doo bruse it before thei sowe it, to make it the lighter of digestion. And as *Strabo* reporteth, they make drinke of it.

Sesamum.

R I G O. What say you to *Sesamum*, that was greatly in vse in the olde tyme?

CONO. *Sesamum* is named with the Greekes *σιναμον*, the Italians *Sesamo*, y^e Spaniard *Aionioli*, the Frenchmen *Ingiolin*. In times past, it hath been more vsed & greatly comended, both of *Columella* & *Plinie*. At this day it is knowen to a very fewe, as a great sort of seedes els are, in so much as the very Coyne that we dayly feede of, we scarcely knowe what it is. Some reckon it in the number of Grayne, and some of Pulse: the stalke thereof is not like Millet or Pannicle, full of ioyntes, but playne and smothe lyke a reede, the leaues thereof ruddy, the seede white, not so bigge as Lineseede, and is contained in little knoppes like Poppy: it is sowed before the rising of the Seuen Starres, after the manner of Italy. *Columella* saith, that he hath seen it in *Cilicia* and *Syria* sowed in June and Iuly, and reaped in *Autume*. It requires a mellowe blacke mould, though it will growe vpon good sandie ground, and forced ground, raine is hurtfull vnto it after it is sowed, where as it dooth good to all other grayne, no great Cattell nor Vermine will meddle with it, it hurteth ground very much, because of the great quantitie and thicknesse of the stalke, and the number of the rootes. *Plinie* writeth, that it was brought out of India, & vsed both for meate and oyle. But to returne to such graine as we are acquainted with. Amongst y^e Sommer seedes is *Hyscelin* to be reckoned. The husbandmen doo sometime make a medly of sundry sortes of seedes, and sowe them partly for Cattell, and partly for hope, that though some of them fayle, yet some will growe. But here must you beware, lest you mingle not Winter Coyne and Sommer Coyne together, for that were a greate oversight, and one of them must needs perish. Some Barley may well be mingled with Dates or Buck, as well for brewing, as for feeding of cattell: and Tares

or other like Pulse may be myngled with Dates, as verie good foode for Beastes. They are to be sowd in tyme and place as I haue tolde before, in my seuerall entreating of them.

RIG O. You haue well satisfied mee for Grayne and Corne, you may nowe (if it please you) doo as much in Pulse.

CONO. Pulse or Bedware, is called of the Greekes *δσπερα*, Of Pulse. the other partes of the frutes of the ground: of these, there are sundry sortes as you haue seene of Corne: some put Millet, *Danicle*, and *Sesannum*, to this kind, becaule *Columella* sometimes puts them in the number of Grayne, & some yme of Pulse: but I folowynge *Plinie* herein, doo put them amongst the kindes of Grayne, accountynge those to be Pulse, whose seedes are conteyned in coddies, as Beanes, Pease, Lentiles, Tares, Chyches, fitches, and such lyke, which all are to be sown in the Spring. Of all kinde of Pulse, the greatest honour is due to the Beane as *Plinie* witneseth, as to a pulse that is most commodious for man and beast. In Greke it is called *κίανος*, in Italian and Latine *Faba*, in Spanishe *Hana*, in French *Fene*, in Dutch *Bonen*. Beanes. This amongst all other Pulse groweth in height without any stay, it hath a thicke leafe, a crested flowre of diuers colours, spotted white and blacke, which *Varro* calles the lamentable letters, it hath a long Coddie, his fruite within broade, like the naile of a man, of diuers colours, it appeareth at the first with many leaues lyke a Pease, and not with one alone like Wheate. It is sowd fyrst of all other Pulse in the Spring tyme as *Virgil* will haue it, and timely, becaule of *Fabalia*, which is the offall of the Beanes, for both the coddies and the stalke, is a foode that cattell much delightes in. *Columella* reporteth howe he heard a skilfull husband say, that he had rather haue the offall of Beanes timely sowd, then the Crophe of that which is ripe in thre monethes, you must sowe them in y^e encrease of the Moone, and after once plowing. It is sayde, that if they be enclosed in Goates doing and sowd, they will yeele greate encrease, and that the partes that are eaten or gnawne, in the encrease of the Moone, will fyll by agayne. If they be sowd neere to the rootes of Trees, they will kyll them. Some holde opinion, that if they bee steeped in Capons blood, they will bee safe from all hurtfull weedes, and

E. J.

that

The first booke entreatyng

that layde in water a day or two before they be sown, they will growe the sooner. The Beane delighteth in riche and well doughted ground, as all other Pulse doth: wette and lowe grounde it dooth not refuse, though all the rest desyre drye grounde, it wayeth not weeding, beyng able to ouergrowe them. Of all other Pulse it onely springeth with an vpright stalke full of knottes, and hollowe. And where as all other Pulse are long in flower, this flowereth longest, flowering forty daies togeather, one stalke beginning when others end, and not all at one time as Wheate, they codde in sundry daies, the lowest part of the stalke flowering first, and so vppward still in order. So fruitefull are they in some places, as you shall finde one stalke to beare a hundred Beanes. The Beanes sticke close to their Coddes, the blacke in theyr toppes, the Latines call *Hilum*, the Cods *Valuuli*, the wormes that breede in them, *Mida*. *Lomentū* is the meale which the people in olde tyme did vse for the smoothing of their skimmes. *Fresa Fabi* was the Beane that was but smally broken, and hulled in the Moll. *Refrina* was that which they used to offer in sacrifice for good lucke with their Coyne. It is good to steepe your Beanes in the water of Saltpeter, a day before you sowe them, you shall keepe them from Wyuels as (*Paladius* sayth) if you geather them in the wane of the Moone, and cherishe them, and lay them vpp before the encrease. Beanes, and all other Pulse doo mend y ground that they are sown in. The next to Beanes in woorthinesse and sowynge is Pease, called in Greeke *πιτος*, in Italian *Pise*, and *Piselle*, in Spanish *Arnera*, in French *Pese*, in Dutch *Errettem*, a Pulse that groweth with hollowe stalkes & full of branches lying vpon the grounde, manie leaues and long, the Coddes round, containing in them round seedes, and white: though *Plinie* write, that they be cornerd as Chich, of which sort we haue some at this day blewish, with flowers in shape like the Butterflye, purple coloured toward the middest. There are two sortes of Pease, the one sort coueteth to climbe aloft, and runneth vppon stickes, to whiche with little winders he bindeth hym selfe, and is for the most part onely sown in Gardens, the other sort groweth lowe, and creepeth vpon the ground: both kindes are very good to be eaten, specially when they be young and tender,

Pease.

der, they must be sowed in warme groundes, for they can in no wyse away with colde: they are sowed eyther vpon fallowes, or rather in riche and peerele bearing ground once plowed, and as all other Pulse, in a gentle and a mellowe mould, the season being warme and moist. *Columella* saith, that ground is made very rich with them, if they be presently plowed, and the Culter turne in and couer that whiche the Hooke hath newly left. They are sowed among Sommer Corne, commonly with the first. First Beanes, Pease, and Lentiles, then Tares, and Dates, as is sayd before. Pease and Tares must be sowed in March and Aprill, and in the wane of the Moone, lest they growe to ranke, & flowre out of order: where as the best sowing for all other Pulse and grayne, is in y^e encrease of the Moone. There are that count Pease to be the Pulse that the Greekes call *ῥεῖος*, the Latines *Erui*, the Italians *Erno*, the Spaniards *Terno*, the Dutchmen *Ernen*, of which there are two kindes, y^e one white, the other red. The latter is wilde, and groweth in hedges and Corne feedes: it is a small plant, hauing his leaues narrowe and slender, his flowre either white, or medled with purple, growing neere together like Pease, there is no great businesse about it, it delighteth in a leane barren ground, not moyst, for it will be spilt with too much rancknes: it must be sowed before March, with which moneth it agreeth not, because it is then hurtfull vnto Cattell. *Erulia* is a Pulse like small Beanes, some white, some blacke, and others speckled: it hath a stalke like Pease, and climeth lyke a Hoppe, the Coddies are smoothe like Pescoddes: The leaues longer then the leaues of Beanes: the flowre is a pleasant foode to Bees. In Fraunce & Lumberdie it is called *Dora*, or *Dorella*, *Phaseolus* in Latine, in Greke *σμιλαξ κηπαία* garden *Smilax*, some cal it *Fasolū*, & *Dolichium*, among the Italians some cal it *Fagioli*, some *Smilace*, *de gli Horti*, others *Faginolo*, *Turcheses*, others *Lasanie*, the Spaniards cal it *Frisoles*, y^e Frenchmen *Fasoles*, and *Fales Pinceos*, y^e Dutchmen *Faselen*, or wylde Bonen. It is a kinde of Pulse, whereof there are white, red, and yallowe, & some speckled with blacke spottes: the leaues are like Iuie leaues, but something tenderer, the stalke is slender, winding, with claspes about such plantes as are next him, running

French
Beanes.

The first booke entreatyng

by so hie, as you may make Herbers vnder hym, the coddies are
 longer then *Jennigreeke*, the Graines within diuers coloured
 and fashioned lyke *Kydneys*: it prospereth in a fat and a peereley
 bearyng ground, in Gardens, or where you wyll: and because it
 climeth aloft, there must be set by them poales or staues, from
 the whiche runnyng to the toppes, it climeth bypon Trees, ser-
 uing well for the shadowyng of Herbers and Summer houses.
 It is sowne of diuers from the Ides of October to the Ka-
 lendes of Nouember in some places, and with vs in March. It
 flowreth in Sommer, the meate of them is but indifferent, the
 iuyce not very good, the Coddies and the Graynes are eaten to-
 geather, or like *Sperage*. The Iewes sell them at Rome pre-
 serued, to be eaten rawe. *Lens & Lenticula*, in Greeke *Πανς &*
Φακί, in Italian *Lenditia bon menastre*, in Spanissh *Lenteza*,
 in French *Lentilla*, in Dutch *Linsen*, is a Pulse very thicke and
 bushy, with leaues like the *Tare*, with thre or foure very smal
 Graynes in euery Coddie, of all Pulses the least, they are soft
 and flatte. The white ones for their pleasauntnesse are the best,
 and such as are aptest to see the and consume most water in their
 boyling. It is sowne with vs in Germanie in Marche and in A-
 prill, the Moone encreasing, in mellowe ground, being rich and
 drie: yet *Plinie* would rather haue the ground leane then ritche,
 and the season drie: it flowreth in Iuly, at whiche tyme by ouer
 muche rancknesse and moysture, it soone corrupteth. Therefore
 to cause it quickly to spring & wel to prosper, it must be ming-
 led with dype dung before it be sowne: and when it hath lyen so
 mingled foure or fyue dayes, it must be cast into the ground. It
 groweth hye (as they say) when it is wette in warme water and
 Saltpeter before it be sowne, & wil neuer corrupt being sprinck-
 led with *Bengwin* and *Vineger*. *Varro* willeth, that you sowe
 it from the fye and twentieth day of the Moone to the thirtieth,
 so shall it be safe from *Snailles*. And *Columella* affirmeth, that if
 it be mingled with *Ashes*, it will be safe from all annoyauce. *Ci-*
cer in Latine, in Greke *ἑσπεριδος*, in Italian *Ceci*, *Cicere Rosso*,
 and *Cicere Bianca*, in Spanissh *Granangos*, in French *Chiche* &
 in Dutch *Cicererbs*, is a bushy kynde of Pulse, hauyng a round
 Coddie, and therein a couple of thre cornered seedes, whereof
 there

Lyntels.

Chyche.

there are that make three kindes, whyte, read, and blacke, differing only in the colour of the floure: the best kinde hath a sticke stalk, crooked, little leaues indented, a whyte, a purple, or a blacke floure. And whereas other Pulse haue their coddles long and brode, according to their seede, this beareth them round: it delighteth in a blacke and a riche mould, is a greatespoyler of land, and therefore not good for new broken by ground: it may be sowne at any time, in March, in rayny weather, and in very riche ground: the seede must bee steeped in water a day before it be sowne, to the end it may spring the sooner: it flowreth in June and July, and then falleth to seede: it flowreth a very long while, and is gathered the fourth day, being ripe in a very short tyme: when it is in floure, of all other Pulse in recepueth harne by raine: when it is ripe it must be gathered out of hand, for it scattereth very soone, and lyeth hid when it is fallen. In the Chyche there neuer breedeth any worme, contrarie to all Pulse else: and because it dyeth awaye Caterpillers, it is counted good to be set in Gardens. *Cicerula* in Latine, in Greeke *Λοιδυρος*, in Italian *Ciceris*, in Spanishe *Cizarcho*, it differeth from the Chiche, only in that it is somewhat blacker, whiche *Pimie* accounteth to haue breuen corners as Pease hath: and in many places about vs, they vse them in steede of Pease, esteeming them farre aboue Pease: for they both yeeld more floure then Pease, & is lighter of digestion, and not so subiect to wormes. *Columella* countes it rather in the number of fodder for cattel, then of Pulse for man: in which number are these that follow. And first *Vicia* in Latine, in Greeke *Βίαιον*, in Dutch *Wycken*, in French *Vessac*, so called as *Varro* thinkes of winding, because it hath tendrels or claspes as the Vine hath, wherby it clymeth vpon such stalkes as grow next it: it groweth halfe a yerde hie, leaues like *Cynitare*, sayng that they be something narrower, the floure like the floure of Pease, hauing little blacke seedes in cods, not altogether round, but brode like the L yntell: it requireth a drye ground, though it wil also grow wel yenough in shadowy places, or in any ground with small labour, being not troublesome to the husbandman: it requireth but once plowng, and looketh for neither harrowng nor dounng, but enricheeth the lande of it selfe, specially if the

Cicerula

Tares and
fodder for
Cattell.

grounde bee plowed when the Crop is of, so that the Stalkes may bee turned in; for otherwise the Rootes and Stalkes remaining, doo sucke out the goodnesse of the ground: yet (as I would haue it sowed in grassie ground, not watrishe, and in new broken vp ground after the deawe be gone, & the moysture dried vp with the Sunne and the Winde. You must beware that you sowe no more, then you may wel couer the same day: for the least deawe in the world doth spoyle it. Neither must you sowe them before the Moone be 24. dayes olde, otherwise the Snayle will deuoure it: his tyme of sowing is, as *Plinie* writeth, at the setting of the Starre called the Verward, that it may serue to feede in December: the second sowing is in Januarie: the last, in March. In Germanie they vse to sowe them in March or Aprill, chiefly for fodder for their cattell. To sowe Tares, and as *Plinie* saith *Beames*, in not broken vp ground without losse, is a greate peece of husbandrie: they flowre in Iune, at whiche tyme they are very good to shewe Horses: it is good to lay them vp in the codde, and to keepe them to serue Cattell withall. Tares and Dates make a good meslinge sowed together. *Lupinus* in Latin, in Greeke λευκός κισσός, in Italian and French almost as in Latin, in Spanish *Atramuz*, in Dutch *Roonsche Boonen*, is a Pulse hauing one onely stalk, the leafe tagged in fve diuisions like a starre, the flowre white, the coddes tagged, and indented about, hauing within them fve or sixe seedes, hard, brode, & red, the leaues therof doo fall. This pulse requireth least trouble, and is of small price, and yet most helpeth the ground of any thynge that is sowed: for there can be no better manurynge for barrayne Vineyardes and Corne feedes then this, which either vpon barrayne ground prospereth, or kept in the Garner, endureth a wonderful whyle: being sodden and layd in water, it feedeth Dren in Winter very wel, and in time of dearth (as *Columella* saith) serueth men to assuage their hunger: it prospereth in sandy and grauelly groundes, in the worst land that may be: neither loueth it to haue any labour bestowed vpon it, nor weareth the goodnes of the ground. So fruitfull it is, as if it be cast among Bulbes and Bypers, yet will it roote and prosper: it refuseth both Harrowing and Raking, & is not ayowed with Aleedes, but killeth

the

Lupines.

the weedes about it. If dounge be wantyng to mende the ground withall, this serues the turne aboute all other: for beeyng sowed and turned in with the plowe, it serueth the turne in steede of dounging: it is sowed tymeliest of all other, and reaped last: it is sowed before all other plowe, a little after Haruest: couer it how slenderly you will, it careth not, an excellent good seede for an euill husbnde: yet despyeth it the warmth of *Autumne*, that it may be well rooted before *Winter* come, for otherwyse the cold is hurtfull vnto it. It flowreth thryse, first in May, then agayne in Iune, and last in Iuly: after euery flowryng it beareth his codde. Before it flowreth, they vse to put in Cattel: for where as they will feede vpon all other grasse or weedes, only this for the bitternesse thereof while it is greene, they leaue vntouched. Being dyled, it serueth for sustenance both of man and beast: to catel it is geuen medled with Chaffe, and for bread for mans vse: it is mingled with Wheate flowre, or Barley flowre: it is good to keepe it in a smokie loast, for if it lye moyst, it is eaten of little woormes and spoyled. The leafe kepeth course and turneth with the Sunne, whereby it sheweth to the husband, euen in cloudie weather, what tyme of the day it is. *Fenum grecum* in Latine, in Greeke with *Theophrastus* and others *βουκερον & τούλη*, with *Fenugreche*, *Dioscorides* *καριος & αἰ γόνιρας*, others *καριλτις*, in French *Fenagres*, and *Fenigrent* in Italian, *Fenigraco* in Spanishe, *Alholmas* in Dutch, sometime by the Latine name, and commonly *Roborne* and *Lockshorne*, cometh vp with a small stalk, the leafe lyke a *Chaeleaued* grasse, it is sowed well in a slender barrayne ground, you must take heede you plowe it thicke, and not verie deepe: for yf the seede bee couered aboute foure fingers thicke, it will very hardly growe. Therefore the ground must be tyld with small plowes, and the seede presently couered with Rakes. There are two sortes of it, the one called of the common people *Riligna* or *cote*, whiche they sowe for fodder in September, the other in Ianuarie, or the beginning of February: when they sowe it for seede, it flowreth in Iune and Iuly, when also it beareth his codde, but the seede is not ripe till August: it is pressed to be eaten after the order of Lupines, with vineger, water and Salt, some put to a little oyle: it is vled both for fodder,

The first booke entreating

and diuers other vſes. Furthermore, of Pulſe called of *Gellius* *Legamenta* we haue theſe general rules, that they al beare cods, and haue ſingle rootes euery one, except the Beane, the Chicke growing deepeſt. The ſtalke of the Beane and the Lupine is alſo ſingle, the others are all full of branches and ſclender ſlippes, and all hollowe. All Pulſe for the moſt part are to bee ſowed in the Spring, and require verry riche ground, except the Lupine, that cares not where he lyes: they are all ſowen in the encrease of the Moone, except Peaſe: if they be watred before their ſowing, they proſper the better: they are ſpeedily to bee geathered when they bee ripe, for they ſuddaynly ſhatter: they will endure longeſt, being geathered in the change of the Moone. It is much to be regarded whether you wil keepe or ſell them, for the ſeedes in the encrease of y^e Moone doo waxe greater, there are that preſerue them in earthen veſſelles, ſtrawping aſhes vnder them, and ſprinckling them with Vineger: ſome vſe althes alone, other ſome vſe to ſprinckle them with Berge wine vineger, as I haue ſaid of the Lentyll. Moreouer, the Greekes haue willed to mingle with the dowing a little Saltpeter when you ſowe them, whereby they ſhall the better ſeeche and be the tenderer: and yf they be not preſently tender, they will to caſt into the pot a little Muſtard ſeede, which will make them ſtraightway weſt. *Theophrastus* addeth diuers things beſide, which were to long to tell.

R I G O. It is needefull for euery huſbandman to ſowe all theſe Crapne and Pulſe in his ground:

C O N O. No, but as I ſaide before, in ſpeaking of grounde and ſeede, you muſt cheereſely ſowe ſuche as beſt agree with the nature of your ground: how be it, there are ſome of them that reſuſe no grounde. There are certayne of them as *Varro* ſayth, that are not ſowed for preſent neceſſitie, but for other afterturnes. And others agayne that are of neceſſitie to bee ſowen, as Corne for man, and Fodder for cattell: of whiche muſt ſpeciall care be had, that there be no wāt of them, without which we can not liue: as Rye, Otes, and Buck. Lupines and certayne Pulſels for fodder, reſuſe no grounde, though it bee neuer ſo barren. Beſides, when as the huſband muſt not only haue a care of providing ſuch as ſerue for the ſuſtenaunce of man, but alſo for ſuch
as

Fodder for
Cattell

as serue for the feedyng of poore Cattell, without whiche the grounde can not be husbanded: therefore must he sowe Pulse for the vse of man and beast, and fodder in more abundance for the sustenance of beastes. Amongst all sortes of Fodder, that is counted for the cheefe and the best, which the people of olde time, and the Italians at this day cal *Medica*, some call it Treeforle, the Frenchmen cal it *Grand tresle*, the Spaniards *Alfalfa*, others call it Burgandie grasse, because it was brought in by the Burgundians, it is now also come into Germanie, and there called Welsholken, in Greeke *μυθικη*. *Plinie* writeth, that it was brought by the Romanes out of *Media* into Italy, differing almost nothing from Tryfolly or Threelaueed grasse: but that it is greater, higher, and ranker, for in stalke, leafe, and flowre, it is all one, it groweth altogether bushing in leanes. In the toppe of the stalke it putteth forth short Coddes, writhen like hornes indented about, and haupng as it were little prickles, wherein is the seede shaped like a Hoone, and growyng to the codde in bignesse as the Lentil: which being chewed, tasteth like Pease: euery Codde hath his seede, it requireth a fatte grounde without stones, full of iuyce and riche: in many places it cometh not vp, in others it springeth very thicke. *Varro* geueth charge, that it be not sowd in too drie a grounde or tyckle, but in good and well seasoned. *Plinie* would haue the ground be drie and very rich. *Columella* biddeth, that the feelde where this *Medica* shalbe sowd, should be broken vp about October, and so to lye mellowyng all the Winter, and then to stir it in Februarie, and the stones cast out, to harrowe it well, and after in Marche to order it Garden wyse, casting it into beddes, euery bedde ten foote broade, and fiftie in length, so that they may be easily wated, and of euery side well weeded: then laying on good olde dounge, let it lye tyll Apryll, and at the ende of Apryll sowe it in such proportion, as euery handfull of seede may occupy fve foote in breadth, and ten in legth: and couer the seede out of hand, raking them with wodden Rakes, for the Summe wil soone burne them. After it is sowen, that it come vp an inche in height, you must beware you touche not the grounde with any iron instrument, but either with your Fingers, or with Rakes of wood,

weede

The first booke entreating

weede it well from all other noysome thinges, otherwyle it will growe wilde and turne to pasture. Let the fyrst haruest be long deferred, to the ende he may somewhat shew his seedes: at other tymes you may mowe it as soone as you will, & geue it to your cattell. Suche as are skilfull in husbandry, doo saye, that if you mingle Otes with the seede of *Medica*, and sowe them, thei wil cause them to stocke very well: it is sowed in Aprill or later, in May, to scape the Frostes, and the seede is cast in like sorte as Wheate is. When it beginneth to bzanche, al other seedes must be weeded away: and being this ordred, you may mowe it sixe tymes a peere. It flowreth sixe times, or at the least fve times, so it be not cut. When you haue mowed it, water it well, and as it springeth, weede it agayne. And thus as I sayde, you may mowe it sixe times a pere, and it shall thus continue tenne peres togeather: it enricheth the ground, al pooze and feeble cattell, are soone brought vp with it: it like wise healeth cattell that are diseased: but when it fyrst springeth, till cattell be acquainted with it, you must geue them but little at once, lest the strangenesse of the foode hurt them: for it maketh them to swell, and breedeth great abundance of blood. *Columella* writeth, that one acre of it will well fynde thre Horses a peere. In some Countreys this hearbe dooth growe in great plentie in euery Meddowe, eyther of the nature of the ground, or through the disposition of the heauens, and sometime the relikes of that which hath been long agoe sown, dooth peerefly spring of the seede that falleth, and ouergrowen with grasse & weedes, doth change into meddowe. I see no cause but that it may growe of it selfe, but that perhaps suche plantes as are brought out of strange Countreys require sowynge and dressing: it is best to be mowed when it beginneth to flowre, for it must not be suffered to seede, whereby the fodder shall be the better: whiche beyng well layd vp, will continue in goodnesse thre peres, to the great profite of the Grasier, for as I haue sayd before, there can be no better fodder deuised for cattell, wherewith they wil better feede, and sooner ryle. The next in goodnesse to this *Medica* is *Cytisus*, wonderfully as *Plinie* writeth commended of *Aristomachus*, & as *Vergil* saith, a good fodder for Sheepe, and beyng drye, a delightfull foode to Swyne:
it

Cytisus.

it may be mowd sundry times in the yere, to the great commoditie of the husband: a little whereof dooth soone fatte by cattell, neither is there any other grasse that yeeldeth either moze abundance or better mylke, the most soueraine medicine for the sickness of cattell that may be: beside, the Philosophers promise, that Bees will neuer fayle that haue this grasse growyng neare them: therefore it is necessarie to haue your grounde stored with it, as the thing that best serueth for Poultry and Cattell: the leaues and seedes are to bee geuen to leane and droupyng Bullem: some call it *Telinen*, some *Trefople*, some great *Helilot*, & Romanes call it *Trifolium magis*, great *Trasle*, it is a plant all hearie and whitish, as *Rhamnus* is, hauyng branches halfe a yard long and moze, whereupon groweth leaues like vnto Fenigreeke or Clauer, but something lesse, hauyng a rising crest in the middelt of them. This plant was fyrst found in the Ilande *Cythno*, and from thence spread throug hout the *Cyclads*, and so to *Greece*, wherby the store of Cheese came to be great: neither is there any countrey at this day, where they may not haue great plentie (as *Columella* saith) of this shybbe. In Italy it groweth about the enclosurs of Vineyardes, it shrinketh neyther for heate, colde, frost, nor snowe: it requireth good grownde, if the weather bee very drye, it must be watered, and when it first springes well harrowed after thre yeres, you may cut it downe and geue it your cattell. *Varro* would haue it sowed in well ordred ground, as the seede of Colwoortes should be, and after remoued and set a foote and halfe a sunder, or els to be set of the flippes. The tyme of sowyng of *Cytisus* is either in *Autumne*, or in the spring, in ground well plowed and layde out in beddes: if you want the seede, you may take the flippe, so that you set them four foote a sunder, and a bancke cast about them with earth well dounge: you may also set them befoze September, when they will very well growe and abyde the colde in Winter: it lasteth but thre yere. *Columella* hath two kindes of *Cytisus*, one wild, the other of the Garden. The wylde dooth with his claspers seede very well: it wyndeth about, and killes his neighbors as the Tuie dooth: it is founde in Cornfeeldes, specially amongst Barley, the flowre thereof is like the flowre of Deale, the leafe if it be bysed, smel-

leth

The first booke entreatyng

Spetic.

leth like Rocket, and being champed in the mowch, it tasteth like Chyche, or Pease. There is an other kinde of fodder among the plantes, unknowen to the o.d wyters, very good to feede both cattell and Poultry. I knowe not whether it be knowe in other countreys beside Germanie, the common people cal it Spury, or Sperie: it hath a stalke a foote in height or moze, busshed forth in many branches, it hath a whyte flowre without any leafe: the flowre endeth in little knoppes as Flaxe hath, conteynyng in them a very little seede like Rape seede. Thei are much deceiued that take it for *Cytisus*, when that (as *Dioscorides* sayth) hath leaues like Fenegreke, and this is altogether without leaues: neither is the seede any thyng like, though the vse be almost one. The best Milke and Butter in Germanie, commeth of this feedyng: wherefore it is esteemed almost as good as Batty, or other grayne: the strawe is better then any Heye: the Chaffe feedeth as well as any Graynes: the seede feedeth Pigeons and Poultrie in Winter passing well: it is sowed in sandie and light groundes all the sommer long, and some sowe it in Spring time with Dates for the seede sake: in *Autumne* and Haruest time it is sowed to feede Cattell: it is profitable for husbannes that dwell in sandy and grauelly Countreys, wherefore they should neuer bee without good store of it, for Hennes, Bees, Goates, Sheepe, Dren, and all kinde of Cattell delight very much in it: now remaineth the sowwyng of Flaxe and Hempe.

RIGO. I looke for it.

CONO. These, although they bee not to be receiued in the number of Corne nor Pulle, Fodder nor Hearbes, yet is there great account to be made of them with husbandmans things, without which no house can be furnished, nor man well apparelled: whiche beyng beaten to a softnesse, serueth for webbes of Linnen, and twystyng of Cordes: and moze, of this so little a seede doth spring that, which (as *Plinie* saith) carrieth the whole worlde hether and thether, that byngeth Egypt to Italy, and carrieth vs from Caes to Ostia in seuen daies. *Linū* in Latine, in Greeke *λινον*, in Italian and Spanish *Lino*, in French *Dulin*, in Dutche almost like, sayyng that they call the seede Lyn and the plant Flaxe, is a very common hearbe, wherewith women

Flaxe.

are

are set a woork: it hath a slender stalk, not muche unlike to Sperie, but that it groweth higher a little, and bigger, with narrow leaues, & long blew flowres in y^e top, which falling away, leaueth behinde them little round knoppes as bigge as a Pease, wherein are enclosed yelowwe seedes: it delighteth in rich ground and somewhat moyst, some sowe it in barayne ground: after once plowing, it is sowed in the Spring, and geathered in sommer. In Gelderland and Gulicke, where there is great store of it, they sowe it about the begynnyng of May: there are agayne that obserue three seasons for the sowing of it, as the weather shall fall out, for it requireth rayne and moysture: the ripenesse of it, is perceiued by the waxyng yelowwe, and swelling of the knoppes that hold the seede, being then plucked by and made in little bundels, it is dyped in the Sunne, the rootes standyng vppwarde that the seede may fall out. Some vse agayne to carde of the knoppes with an iron Combe, and dyping them in the sunne to geather the seede. The bundels afterwardes are layde in water heated with the Sunne, with some waight vppon them to keepe them downe: the rynde waring loose, sheweth when they haue been steeped yenough. Then the bundels vnloosed and dyped in the Sunne, are beaten with beetels, when as the vtter rynde is pilled of, and combed and hacked vppon an iron combe: the more wrong it suffereth, the better doth it prooue: the Towe is seuered from the flaxe, and appoynted for his vse, so are they seuerally spon vpon the Distaffe, made by in bottomes, and sent to the Cleauers, whereof are wouen webbes, to the great comoditie of all men. Last of all, the webbe is layde out in the hotte Sunne, and sprinkled with water, whereby it is brought to a passing whitenes. It may be remembred, that not long since the women of Germanie knewe no costlier attyre. The best flaxe that is at this day, is brought from Holsconia, *Linonia*, & those Countreys, farre excellyng ours in heyght and goodnesse. Except there bee greate encrease of it, and price in the Countrey where you dwel, *Columella* would not haue you meddle with the sowing of it, for it is hurtful to the ground, as *Virgil* hath noted.

*Flaxe where he growes doth burne the feeelde,
The like dooth Oates and Poppey yeelde,*

And

The first booke entreatyng

Hempe.

And therefore (but that women must haue something to occupie their handes with all) it were more profite to sowe the ground with corne, and to bye linnen abroad, especially if you way the hurt of your ground, and the charges of the making. Hempe, in Latine *Canabis*, in Greeke κνισαβις ημερσ, in Italian *Canna-be*, in Spanish *Cannamo*, in Frenche *Chamura*, and in Dutche *Haueph*, is a plant of the Reedish kind, hauing a very strong sa- uour: it groweth with a single stalke, and many tymes to suche a height, that it matcheth with indifferent Trees: it is of great ne- cessitie for the vse of man, and serueth both for makyng of Can- uisse, and framing of Ropes: the stalke hath many knottes, out of whiche proceedeth branches with narrow leaues indented and sharp. *Dioscorides* describeth both the wilde Hempe, and the Garden Hempe to haue leaues like the Ashe, hollowe stalkes, a stinking sauour, and rounde seede. There are two kindes of it, the male, that is without floure, and beareth a seede of sundry co- lours: and the female, that, to recompence her barrennesse, doth ycelde a white floure: it is sowed in Gardens, Orcharde, or o- ther good ground (as *Plinie* would haue it) after a Southwest wind: with vs it is sowed in the end of Aprill, for it can not away with cold: some sowe it at the rising of the starre called the Ver- ward, whiche is at the ende of Februarie, or the beginnyng of March: it loueth rich ground wel doinged and watred, & deepe plowed: it is noughty sowing of it in raynie weather, the thicker you sowe it, the tenderer it will be, and therfore many times it is sowed thryse, though some there be that appoynt to euery foote square sixe seedes. The female or fyble Hempe is first pulled vp, after ward the Male, or the Carle, when his seede is ripe, is plucked vp, and made vp in bundels, layd in the Sunne for thre or foure dayes, and after is cast into the water, with weight layd vpon him for eight or tenne dayes, till he be sufficiently watred, and as flaxe, till the Rynde ware loose: then taken out, it is dried with the Sunne, and after broken in the Brake, and then combed and backed for Harne and Ropes. Of Hempe, are made Cables, Cordes, Nettes, and Sayles for Shippes, garments for Labourers, Shertes, and Sheettes: the Shales or Stalkes serue for the heating of Duens, or kindeling of fyres.

RIGO.

Gulicke &
France:

R I G O. In the Countrey of Gulicke, and some partes of Fraunce, I remember I haue scene an hearbe planted of the common people with great diligence, that serueth as they sayd for Dyars.

Woade.

CONO. You say true, that hearbe *Cesar* in his Commentaries of the warres of Fraunce, calleth *Glastum*, in Greeke is α-τις κνερς, in Italian *Gnado*, in Spanishe *Pastel*, in Frenche with the common soyt *Guadam*, and *Guesde*, in Duch *Weyt*, the Dyars doo vse it, and with them it is greatly esteemed, and great gaine ariseth thereof vnto the people of Gelderland, Iulies, and Turyn, and diuers Countreys els: the leaues as *Plinie* writeth, are like vnto Dock leaues. *Dioscorides* writeth of two kindes, the wild, and the Garden Woade, saying, that the Garden Woade which Dyars vse, hath leaues like Plantayne, but something thicker, and the wild, leaues like Lentil, with yellow flowres: with this hearbe *Cesar* saith the people of Englande were woont to paynt their faces and bodyes, to seeme more terrible to their enemies: it requireth lyke sowynge and soyle as Wheate doth: but it is a great soker of the ground, and muche hurteth it: it would haue a very riche and a fat ground, and well digged: for the ground were better to be turned vp with Spades then with Plowes for the sowynge of this Plant, and it must be very well weeded. It is sowed in Gelderland in Aprill, and after the common peoples rule, in Easter weeke: at the first fallowynge they Harle the grounde, after sowe it: you must bee very heedefull in the weeding of it. When it is growen a handfull hie and more, they suffer it not to flowre, but with an instrument for the purpose, they cut it close by the roote, wash it, and carry it to the Wyll, and suffering it to growe agayne, they cut it three or foure tymes, and so leaue it to seede. The greene hearbe they grinde in Milles like Apple Milles, pressing it, till they get out all the iuyce thereof, then roule they it by with their handes in round balles, and so laye it vpon boorded floores to be dryed.

R I G O. You haue greatly delighted mee, in describyng vnto me the order of sowynge of seedes, without which, not onely the people of the Countrey, but also the Courtiar & Citizen are not able to liue: my desire is now to vnderstande the order of Har-
uelt,

uest, the Countrey mans long looked for tyme, and the rewarde of all his toyle.

Haruest.

CONO. I wil proceede in the accomplishing of your request. When the Corne is ripe, before it bee scorched with the greate heate of the Sunne (whiche is mosste extreame at the rysing of the lesser Dogge) it is to bee cut downe out of hande: for delay herein is dangerous. First, because that birdes, and other beermine will deuoure it: and againe, both the Grayne and the Care, the toppe and the strawe beinge bittell and ouer drye, will soone fall to the ground: if storme or tempest chaunce to aryse, the greatest part thereof will to the ground, and therefore it must not be linged, but when it dooth looke yelowie in euery place, and before that the Grayne be thorowe hard, when they come to looke reddishe, you must then haue it in, that it may rather ware in the Barne then in the feelde. Experience teacheth, that if it bee cutte downe in due tyme, the seede will growe in fulnesse as it lyeth in the Barne: for the Moone encreasing, the Corne growes greater: at the chaunge, you must geather suche seede, as you woulde shoulde bee least faultie. Varro sayth, that the best tyme for Haruest, is betwixt the Sunnestay, and the Dogge dayes: for the Corne they say, dooth lye in the blade. xv. dayes, flowreth. xv. dayes, and ripeth in. xv. dayes. Amongst Grayne & Pulse, the first that is to be geathered, is Rape seede. And because the seede, when the cod beginneth to ware yelowie, declareth ripenesse, it must bee geathered out of hande: and syth the seede will easly skatter, it must bee layde eyther in playne smoothe places in the feelde, or vpon Canuasse: and if it be presently to bee carryed, the Wayne or Cart must be lyned with sheetes, lest with iogging and tottring of the carpage, the seede fall thorowe. You must take good heed as well here, as in all other Pulse, that you preuent the rayne, for the rayne falling, the coddres doo open. As soone as your Rape seede is of, if the ground be plowed, you may sowe Bucke, or Branke as they call it: so that of one peece of ground in one yeere, you may make two haruestes. Next vnto Rape haruest in these countreys, followeth the haruest of Winter Barley, which is to be dispatched before the seede (the Care beyng ouer dyled) doo fall, for they haue

th Rape haruest.

Haruest for Winter Barley.

haue not huskes to containe them as Wheate hath, and the Eares being bittell, will soone fall: yet some thinke it best to let the Barley lye a while in the feed, wherby they thinke the Graine will waxe the greater. Then foloweth the Hempe haruest. But first (as I sayd before) the Fimble or the Female, is pulled, and is dyled a while in the Sunne, then (bounde vp in bundels) it is throwen into the water, and kept downe with some weyght, that it swimme not a boue. After lyke wyse the Male, the seede declaryng his ripenesse is pulde by, and the seede being thershed out, it is cast into the water, tyll the stalke be soft: after, being dyled in the Sunne, it is made vp in bundels to be knockt and shaled in winter eueninges. Rye is to be mowed in Iune or Iuly, and after that, Wheate. No better rule, then before the Grayne be harde, and when it hath changed colour. An old Proverbe (as Plinie saith) it is better to haue in haruest two daies to soone, then thre daies to late. In Rye there is not suche feare in scattering as in Wheate, which as soone as it is ripe, wil shedde with euery wind. Wherfore good heede must be taken, that you linger not with Wheate after it is ripe: although Plinie affirmeth, that Wheate will haue greater yeelde when it standes long: but surely deferrynge of it is daungerous, as well for the deuouring of Byrdes and Clermine, as for shattring and falling of the seede through storme and weather: as the prooue was seent in the great wyndes that were in the yeeere of our redemption, 1567. Then foloweth the Haruest of Pease, Beanes, Tares, and Lentyles, accordyng as they are tynely sowen, wherein you must take heede, as I warned you before in Rape seede, that they lye not abrode in the rayne: for if they doo, they will open and loose their seede. Last of all, commeth the Haruest of the other sommer seedes, as of Barley, Pannicle, Millet, and Dates. It is founde by experience, that rayne is good for Dates after they be downe: for it causeth them to swell and to be fuller, and to that ende they are left in the feede many tymes twoo or thre weekes after they be downe.

R I G O. What order haue you in your reaping?

C O N O. There are diuers sortes of reaping, according to the maner of euery countrey. Some with Sickles, which differ also

Hempe har-
uest.

Rie & wheate
haruest.

The haruest
of all other
Corme and
Pulse.

Diuers forme
of reaping.

The first booke entreatyng

as the worke requires. In this Countrey we vse three sortes of Corne Sythes, for either we haue a Syth like a Syckle, which holden in the right hand, they cut the strawe close by the ground, and haue in the leaft hande a long Hooke, wherewith they pull togeather that, that they haue cut, and laye it in heapes: and in this sort Wheate and Rye, and suche Grayne as hath the sturdiest strawe, is reaped. In other places, as in *Iulie*, where the ground being very riche, the Corne groweth higher and rancier, there they holde their leaft hand full of Corne, and with the right hand with toothed Sickles they cut it, leauing the strawe vnder their handes long, to helpe the ground withall. In other places they vse a greater Sythe with a long Swath, and fenced with a croked frame of stickes, wherewith with both their handes they cutte downe the Corne, and lay it in Swathes as they doo Grass when they mowe it, and with that they mowe the higher sortes of corne. *Varro*, and *Columella*, and other, doo tel of sundry other sortes of reaping. *Palladius* teacheth, beside the labour of men, a shorter way to be doone with an Dre, that shall in short tyme cut downe all that groweth, whiche was wont to be vled in Fraunce. The deuise was, a lowe kind of Carre with a couple of wheeles, and the Front armed with sherp Sickles, whiche forced by the beast through the Corne, did cut downe al before it. This tricke might be vled in leuell and champion Countreys: but with vs it wuld but make illfauioured worke. In reappng, you must regarde to goe with the wynde: for if you worke against the wynde, it wilbe hurtfull as (*Xenophon* sayth) both to your eyes and your handes. If the strawe be but short, you must goe neerer the ground: if it be long, you may put your Syckles to the middlest to dispatche it the sooner, and to make it thershe the better: and the stuble vpon the ground must either, according to *Virgils* rule be burnt, or rotte vpon the ground for the bettring of the lande. Some preserue that which is longest, to thatche Barnes, Stables, and Countrey Cottages withall. And where Hay is scant, it serueth for foddering of Cattell: for Barley strawe is a foode that Bullockes loue well, and beside, all kind of strawe, is good to litter withall. When the Corne is downe, it is presently to be bound in sheaves: although Barley, Dates

Dates, and other Corne and Pulse is made vp in Coppes and Ryckes, but not without hurt and hazarde. The Corne beeyng cut, is not to be had into the Barne presently, but to be let drye, accordyng to the nature of euery Grayne and Pulse: for if it bee carryed in before it bee through drye, it corrupteth and rotteth. Dates and Bucke, are longest leste abroade, as also Lentyles, Pease, and Pulse: because they are longest in drying. Wheate may soonest be carried, if it be not mingled with too many weedes, that hinder the drying of it. When haruest is in, the ground must out of hand be plowed, both to kill the weedes, and to make it y meeter for the next sowynge. The corne cut downe and drye, is to be layde either in Barnes, Houels, or Staeks, and after in Winter to be trode out with beastes, or threshed out with flailles, and to be cleaned with fannes.

Plowing after Haruest.

RIGO. In Italy they vse to treade out their Corne with Cattell, the like reporteth *Xenophon* of the Greekes.

CONO. I haue seene it mee selfe, where they rather take Horse then Oxen, and that tyme they also winnowe their corne, thinkyng the Southwest wind to be best for that purpose: but to stay for that, *Columella* thinketh but the part of a small hus band.

RIGO. I see you haue very large Barnes, what order obserue you in the buildyng of them?

CONO. You must so set your Barne, that the Corne may be well brought into it, and see it be very close on eucry side, leauing open a space for two doores, a fore doore and a backe doore, but so, as neither of them open to the West, but rather North and East, and at both sides of the floore bestowe your Corne in seuerall tasses and moowes, so that you may easily come to eucry one at your pleasure. And though the Corne be laide vppon Battes in the floores, yet let there be a space left in the middlest, that may bee open to the very toppe, that you may fetch what sort you list to be threshed. In some places they haue a Pulley in the middlest, wherwith they hoyle vp the Corne to the very Rafter of the house. In Holland they haue fewe close Barnes, but all Houels and Staeks, so placed with hangyng roofes vppon postes, that with pimes and wynchies, they may leighthen it, or let it downe as they list.

The Barne.

F.ij.

RIGO.

The first booke entreatynge

R I G O. Those kinde of Barnes they say, are not so subiect to Myle and Rattes, nor so chargeable as the other.

CO N O. How soeuer the Barne be, you must place it as hie as you may, least the Corne be spoyled with moysture or dampes. Some thinke it better for them to be thatched then tiled: the largenesse must be according to þe greatnesse of your occupyng. Some to the end Cattes and Weeels may the better come by, they doo vaute the floore with Bricks, and laying rafters thereon, doo lay on their Corne. The floore must be fayre and smooth made, so as the Corne may be well threashed or troden out. *Columella* would haue the floore faire paved with Flint or Stone, whereby the Corne will the sooner be threashed, and the floore not hurt with beatyng and trauelyng of Oxen: and when it is fande or wyndowed, it will not be full of grasse and durt, as the earthen floores peeble. But we content our selues with our earthen floores, well made and of good earth, mixed with a little Chaffe, and the groundes of oyle: for this preserveth the Corne from Myle and Emets. You must make it very euen and leuell, and after it is mingled with Chaffe, let it bee well troden, and so suffered to drie. You must keepe also from it Beastes and Poultry, which with tramplng and skraping wil make it rugged and vneuen. When the floore is drie, the Corne layde on it, is beaten out with Flayles and cleaned with Fannes, though in some place they rather lyke to treade it out with Oxen, and to windowe it after the olde fashion with the winde.

Garner.

R I G O. Well say, when you haue thus threashed your corne, what wayes haue you then to keepe it from Myleis?

CO N O. The Garners, or Corne loftes, wherein your corne thus threashed and cleaned shalbe layde, must stande hye, that they may be blowen through with the Easterne and Northerne windes, to whiche no moysture from the places adioyning must be suffered to come: for þe quarters of the Heauen that are coldest and driest, doo both preserve Corne the longest. In Spayne and *Apulia* being hotte Countreys, the winde is not onely let it on the sydes by windowes, but also at þe bottome by grates. Some againe preserves it in vaultes vnder the ground, where the drie earth doth cherishe suche fruites as she hath brought forth, vscd
as

as *Parro* sayth, in *Spayne* and *Carthage*: and in our dayes we vse to keepe both *Wine* and *Crayne* in such vaultes. In Countreys that are very wet and watrishe, it is better to make them in *Garrettes* as hie as may be, haupng good regarde that it bee wel walled and floored. Moreover, where as *Corne* is subiect to *Wpuels* and *Uermine*, except it be very safely layde vp, it will soone be consumed: therefore you must make with *Clay* mingled in steade of strawe with heare, then ouercast it within and without with white *Potters Claye*, last of all, steepe the rootes and leaues of wylde *Cucumbers* in water two dayes, and with that water, and *Lime*, and *Sande*, make plaister, and washe therewithall the walles within: albeit *Plinie* countes *Lyme* as hurtfull a thing as may be for *Corne*. Some mingle with *Lime* the wyne of *Cattell*, as a thing that will destroy *Wpuels*, or the leaues of *Houseteeke*, of *Moyme wood*, or *Hoppes*: but specially if you haue it, there is nothing so good to destroy all such *Uermine*, as the dregges & bottome of *Oyle*: some vse in the steade therof, the pickle of *Herringes*. Hauing in this sort ordered their seelinges, & their floores being dry, they suppose that no hurtfull woorme shall annoy what soeuer corne they lay in them. Some lay vnder their *Corne*, *fleewood*: others thinke it an assured remedie, if they be often samued & winnowed, and thereby cooled: but *Columella* thinks it untrue, & that by this meanes the *Uermine* shall not onely be not driuen out, but they shalbe dispearsed throughout all the *Corne*, which if they otherwile be left alone, will meddle with no more then the outwarde partes, for a handbreadth depth within, there neuer breedes any *Wpuels*: and therefore he thinks it better to let that alone that is already corrupted, and will goe no further, then with farther medlyng to marre also: it is as easie matter when so euer ye neede to occupie it, to take away that is tainted, and to vse the rest. But for all this, experience teacheth vs, that there is no so good a remedie to destroy the *Wpuel*, as is the often samypng and wynnawing in Sommer. After the first two yeres, they holde opinion they wil not meddle with *Corne*: but I weerie you with carryng you to muche about, and if it please you, we will returne home.

R I G O. If it be for your ease so to doo: otherwile there can be

Against bree-
dyng of Wy-
uels.

The first booke entreatyng

Of pasture
& meddowe.

no greater pleasure to mee, then walking abroad to heare you talke of husbandry. Are these that I see your Pastures, where your fatte Oxen, and your Hares, and your Coltes goe leaping?

CONO. They are so. I lay all my Pastures severall, for euery kinde of Cattell to be by hym selfe: in the hythermost that you see, are my Cattell that I fatte: in the next are my Horses, my Hares, and my Coltes: in the next are my young breede, Deerelinges, and Twopeereelinges. The Meddowes that you see in yonder Valley, lye al to be mowed. Here next to my house, are my Sucklings, that are brought to their dammes to sucke thysle a day, and therefore ought to be neare: howe be it, suche as feede farre of, must diligently and dayly bee looked to, for feare of diseases.

RIGO. Since I haue troubled you this farre, I can not leaue till I vnderstand all your orders.

CONO. No trouble at all to me, but rather as I said before, the recording here of, is my great ioy: for in talking of these matters you bring me abedde.

RIGO. I pray you then take the paynes to describe mee the ordering of Pastures and Meddowes, when as there seemeth to be a great affinitie betwixt them and Corne grounde, and because they are sometymes also to be plowed, mee thinketh this part remayneth to be spoken of.

CONO. With all my hart, I will satisfie your desyre in so muche as I am able: and in deede since I haue all this whyle spoken of Corne grounde, it is not out of order to tell you my minde of Pasture: and although Cato in some places doth geue the preeminence to the Vineyarde, yet other olde wypters doo most of all preferre Pastures, as the ground that requireth least a doo about it: and therfore they were called as Varro saith, *Prata*, because they were *parata*, alway in readinesse, and needed neither great charge nor labour, nor are in danger of storme or tempestes, as other kinde of grounde is, excepte suche parcels as lye neare Riueres and Ilandes, whiche are sometimes ouerflowed: and that discommoditie is sufficiently recompenced with the fatnesse that the water leaues behind it, whiche enricheth the grounde,

*Prata quia
Parata.*

ground, and makes it the better peryl to peeble his gayne eyther in Pasture or Meddowe. The pastures with vs doo commonly serue both for Pasture or Meddowe when we list, specially in suche places where the ground is ritche and drye, which they had rather to employ to Pasture, because with dounying of Cattell, it wateth alwayes the better, whereas with continuall bearyng of Hey, it hath growen to bee maffe and nought: but where the grounde is alwayes wette and watrishe, there it is better to let it lye for Meddowe. *(Columella* maketh two kindes of Pasture ground, wherof one is alwayes drye, the other ouerflowen. The good and the ritche grounde hath no neede of ouerflowyng, the Hay beyng muche better that groweth of the selfe goodnesse of the grounde, then that whiche is forced by waters: whiche sometime notwithstanding is needefull, if the barrenesse of the grounde requireth it: for in badde and noughtie ground, good Meddowe may be made, if it lie to be ouerflowen: but then must the ground neither lye hollowe, nor in hilles, lest the one of them keepe the waters vppon it to long, and the other presently let it foorth agayne. Therefore lyeth the ground best, that lyeth leuelest, which suffereth not the water to remayne very long, nor auoydeth it too soone. If in suche ground it chaunge to stand ouerlong, it may be auoyded with waterstreame at your pleasure: for both ouerplus, and the want of water are alike hurtfull vnto Meddowes. It is very handsome, where drye and barrayne ground lyeth so by the Riuer, as the water may be let in by Trenches when you lyst: in fine, the occupying of Pasture groundes require more care then trauayle. First, that we suffer not Bushes, Thornes, nor great weedes, to ouergrowe them, but to destroy some of them, as Brembles, Byers, Bulrushes, and Sedges in the end of Sommer, and the other that be Sommer Weedes, as Sowthystell, and all other Thystels, in the Spring. You must take heede of Swyne, that spoyle and curie by the grounde illaoueredly, and all other Cattell: except it bee in hard and drye weather, for otherwise they gult and marre the grounde with the deepe synkyng of their feete treading in the Grasse, and brakyng the Rootes. The badde and barrayne groundes are to be helped with dounyng in Winter, specially in

J. iij. Februarie

The first booke entreating

Februarie, the Doone entreasing, and the stones, stickes, and
 such baggage as lye scattered abroad, are to be throwen out soo-
 ner or later, as the ground is. There are some Heddwes that
 with long lying, are ouer growen with Mosse, whiche the olde
 husbands were woont to remedy with casting of certaine seedes
 abroad, or with laying on of dounge, specially Pigeons dounge;
 but nothing is so good for this purpose, as often to cast ashes up-
 pon it, for that destroyeth Mosse out of hand. Notwithstanding,
 these are but troublesome remedies. The best and certaintest is
 to plowe it: for the ground after his long rest, will beare goodly
 Coyne. But after you haue plowed it, it will scarce recouer his
 olde estate agayne for Pasture or Heddwes in three or foure
 yerres. When you meane to let your ground lie agayne for Hed-
 dwes or Pasture, your best is to sow it with Dates, and to har-
 rowe the ground euen and leuell, and to hurle out all the stones
 and such things as may hurt the Sythe: for Dates is a great
breeder of Grasse. Some doo cast Hey seede, gathered from the
 Heyloft of the racks, ouer the ground before they harrowe it.
 Others agayne, when their Heddwes haue lye long, sowe
 Beanes vpon them, or Rapeseede, or Millet, and the yere af-
 ter, Wheate: and the thirde yere they let them lye agayne for
 Heddwes or Pasture. You must beware, that while the ground
 is loose & soft, you let not in the water, for the force of the water
 will washe away the earth from the rootes of the Grasse, and
 will not suffer them to growe togeather: neither must you (for
 the like daunger) suffer Cattell to come vpon it, except in the
 seconde yere Goates, or Sheepe, or suche like, after you haue
 mowed it, and that if the season bee very drie. The thirde yere
 you may put on your greater sort of Cattell agayne, and if the
 ground be hilly and barrayne, you maye dounge the highest part
 of it in Februarie, as I said before, casting on it some Hey seede:
 for the higher part being mended, the raine or water that comes
 to it, will carrye downe some parte of the richenesse to the bot-
 tome, as I saide before, when I spake of the manuring of exa-
 ble ground. But if you will lay in newe ground for Heddwes,
 and that you may haue your choyle, take such as is rich, deuyne,
 leuell, or a little hanging, or choole suche a valley, where the wa-
 ter

Pigeons dounge
 or ashes doth
 fyll mosse.

ter can neither lye long, nor runne away to fast: neither is the rancke Grasse alwayes a signe of good ground: for what goodlier Grasse is there saith *Plinie*, then is in Germanie, & yet you shall there haue sand within a little of the vpper part. Neither is it alway a watrie ground where the Grasse growes hie, for the very Mountaines in Sycherland yeeld great and hie Grasse for Cattell. The Pastures that lyes by the Lakes of *Dumone* in *Austri* and *Hungry* are but slender, nor about the *Rhine*, specially at his falling into the Sea about *Hollande*, as likewise in *Friselonde* and *Flaunders*. *Cesar Vopiscus*, the *Freedes* of *Roscium* were the principall of *Italie*, where the Grasse would so soone growe, as it would hide a Staffe in a day. You may make good Meddowe of any ground, so it may be watered. Your Meddowes are to be purged in September and October, and to be rid of al Bussbes, Brambles, and great foule Weedes, and al thinges els that annoy them: then after that it hath often bene stirred, and with many times plowing made fine, the stones cast away, and the cloddes in euery place broken, you must dounge it well with fresh dounge, the Poone encreasing. Let them be kept from gulling and tramping of Cattell. The Mouldhilles and douncing of Horse and Bullockes, must with your Spade be cast abroade, which if they remaine, would either be harborours of Antes and such like Vermine, or els breeders of hurtfull and impositable weedes: your Meddowes must be laide in towards March, and kept from Cattell, and made very cleane: if they be not riche, they must be mended with dounge, which must be laide on, the Poone encreasing, and the newer the dounge be, the better it is, and the more Grasse it makes: which must be laide vpon the toppe of the highest of the ground, that the goodnesse may runne to the bottome. The best hearbe for Pasture or Meddowe, is the Trefoule or Clauer: the next is sweete Grasse: the worst as *Plinie* saith, is Rushes, Fearn, and Horetaple.

R I G O. Howe shall I knowe when the Grasse is ripe, and ready to be cutte?

C O N O. The time of cutting of it, is when the Bent beginneth to fade and to waue stiffe, and before it wither. *Caro* biddes not to mowe your Grasse with the latest, but before the seede be ripe.

grasse hyring
a staffe in a
day.

Meddowes to be
dounced the
more encreasing

The first booke entreating

ripe. It is best cut downe before it wyther, whereby you shall haue both more, and better Hey of it. Some, where they may ouerflowe it, doo water it a day before they cut it, it cutteth better after a dewye Euenyng.

RIGO. Doo you cut Grasse in the like sort as you doo corne?

CONO. Almost in y like same sort, some do vse short Sythes, mowing it with one hand: but we here do vse the common great Sythe, mowing with both our handes, as I saide before, that Dates, and Barley, and suche other like Corne was mowed: whiche Sythes wee vse to sharpe with Whetstones, of instrumentes of Wood dyessed with Sande. The Grasse being cutte, must be well tedded and turned in the Sommer, and not cocked till it be drie: and if it chaunce to bee wette with rayne, it must not be turned, till the vpper part be dyled. There is a measure to be vsed in making of it, that it bee not had in too drie, nor too greene. The one sort, if the iuyce be dyled vp, serueth onely for litter: the other (too greene and moyst) if it be carryed into the Loft, rotteth, & the vapour being ouerheated, falleth on fyre and burneth. And if so be the rayne chaunce to fall vppon the Grasse that is newe cut downe, if it be not stirred, it takes not so muche harme: but if it bee once turned, you must still be stirring of it, otherwise it will rotte. Therefore the vppermost part before it be turned, must bee well dyled with the Sunne and the Wynde: when it is dyled, we lay it in windowes, and then make it vp in Cokes, and after that in Hoowes, whiche must be sharpe and piked in the toope, the better to defende it from the rayne, which if it doo not fall, yet is it good so to doo, that they may sweate in the said Hoowes, and digest what so euer moysture is in it. And therefore good huslandes doo not lay it vp in their Loftes, till suche time as it hath sweat in the Feelde. Grasse is commonly mowed twyle a yeere, in May or Iune, and againe after Harvest: the first mowing is counted the best. As soone as the Heyes of after the first mowing, it woulde be ouerflowed (if you may conueniently) to the ende the after swath may be mowed in Autumie, whiche they call in Latine *Cordum*. In the Dukedome of *Spoleto*, it is saide they mowe foure times a yeere, beyng drye grounde, and diuers other places thysle a yeere. *Medica* may be
cutte

cutte fixe tymes a peere, if it bee ordered as it ought to be. It is best mowed when it beginneth to flowre: for it must not growe to seed: being dried, it is made up in bundels, & kept good three peeres, to the great comfort of poore Cattel: but because I haue told you of *Medica* before, it is but in vaine to rehearse it again.

R I G O. You haue spoken of a verie large and a great knowledge of husbandrie, which out of doubt requireth in a man great trauayle and diligence.

CONO. It requireth in dede great diligence and trauayle, howbeit, it recompenceth the paines and the charges not without great gapes, whereof *Plinie* bringeth for example *Caius Cresimus*, who when vpon a little peece of ground he reaped more fruite and graines a greate deale, then his neighbours did vpon their great occupiynge, grewe into great hatred amongst them, as though he had bewitched their feeldes: whereof being accused by *Spurius Albinus*, and fearing to be condemned, when the Quest should passe vpon him, he bringes all his instruments of husbandry into the common place, and brought in therewith all his Daughter, a toly great royle, his iron tooles perfectly wel made, great Spades, mightie Coulters, and lustie Cattel: loe here (quoth he) myne enchauntments, neither can I bring before you my greate and painefull labours, watchinges, and sweat: wherevpon hee was presently quitte by the voyces of them all. But I keepe you to long about my husbandry, it is good tyme we leaue and goe home.

The diligence
of Caius
Cresinus.

R I G O. With a good will. If I may obtayne one thyng at your handes, whiche when you haue made an ende with, I wil trouble you no longer.

CONO. What is that?

R I G O. If a man would bye a Farme, or a Mannour, in what sort shall he best doo it? for I doubt not but you haue good skill in suche matters.

CONO. *Ischomachus* in *Xenophon* telleth, & his father taught hym that he should neuer buye a peece of ground, that had been skilfully or curiously husbanded before, but rather such ground as by the slouthfulnesse and pouertie of the master, had lyen untilled and neglected, and yet seeme to be very good ground: as

is

The first booke entreating

it is better to bye a leane Horse, so that he be not olde, and that he haue the tokens of a good Horse, then a fatte Horse, and one that is curiously kept. A wel ordeyed peece of lande is held deare, and yeeldes no great encrease, and therefore is neither so pleasant nor so profitable, as that which by good husbandrie may be made better. *Cato* would haue two thinges to be obserued in buying of lande, the goodnesse of the grounde, and the holsomenesse of the ayre of whiche two, if either be lackyng, whosoerer dooth bye it, he iudgeth hym mad, and meete to be sent to *Bedlem*: for none that is well in his wittes, will bestowe cost vpon barraine ground, nor hazarde him selfe for a little ritche ground, to be alwayes subiect to pestilentiall diseases: for where a man muste deale with the Deuil, there is not onely his commoditie, but his life doubtfull, and rather his death then his gaine certaine. After these two principal notes, as *Columella* saith, *Cato* added of like weyght these three that folowe to bee regarded: the Way, the

- 1 **Water, & the Neighbour.** The goodnesse of the way is a great matter, for it both makes the maister haue a delight to go about it, and it is commodious for carriage, whiche bringeth greate
- 2 gayne, and little charges. Of the commoditie of Water who doubteth, without whose vse no man is able to liue. Of a mans
- 3 neighbour, he would haue a man haue speciall regards. *Hesiodus* saith, *τὴν κακὸν λείον*, an euill neighbour is a great mischief. I haue knowen diuers, that for the troublesomenesse of theyr neighbour, haue forsaken good dwellinges, and changed Golde for Copper, because they haue had false knaues to their neighbours, & quarellers, that suffering their cattell to runne at large in euery mans grounde to spoyle their Corne and their Tines, would also cutte downe wood, and take what soeuer they finde, alwayes byabling about the boundes of their ground, that a man could neuer be in quiet for them: or els haue dwelt by some Caterpillar Ruffian or Swashbuckler, that would leaue no kinde of mischeefe vndoone. Amongst all whiche commonly there is not so ill a neighbour, as the netwey start, that takes vpon hym the name of a gentleman, who though you vse him neuer so wel, will at one tyme or other geue you to vnderstande from whence he comes, and make you sing with *Claudian*.

ASPERIVS NIHIL EST HVMI CVM SVRGIT IN ALTVM.

A leudar wretch there lynes not vnder skie,

Then Clowne that climes from base estate to hye.

As the Proverbe in Englande is, Set a Knaue on horsebacke, and you shall see hym shoulde a Knight: for an Ape will be an Ape, though you clothe hym in Purple. Surely *M. Portius* would haue a man shunne the neighbourhood of suche as the pestilence. I for my part am happie in this poynt, that I haue no neighbour that I neede to feare.

R I G O. Perhaps they dare not for your auctoritie doo, as otherwise they would.

C O N O. But since death and other casualties ridde a man of them, the dwelling is not to be left, if it haue other good commodities, except it be placed in the borders of sundry Countreys or be subiect to inuasions. Some commend the dwelling that hath faire wayes about it, is neare some Riuer or good market, whereby a man may carry his marchandise with lesse charges. The olde fellowes would neuer haue a man place hym selfe neare the hie way, for pilfering of such as passe by, and troublesome of ghestes, as I said before in speaking of y placing of an house. In the letting of a Farme, those thinges are to be obserued that I spake of before, in describving of a Baylis of husbandry and his labour: that you let it to suche, whose traualle and good behauour you may be assured of, and that you regard more their good ordering of the land then the rent, which is least hurtfull, and most gainefull. For where as the ground is well husbanded, you shall commonly haue gayne, and neuer losse, except by vnreasonableness of the weather, whiche the Ciuill Lawyer sayth should not be any damage to the Tenaunt, or the inuasion of the enimie, where the Tenaunt can not helpe it. Besides, the lord must not deale with his Tenaunt so straightly in euerie point, as by law he might, for his rent daies, bargaines of wood, quit rentes, or such, the rigour wherein is more troublesome then beneficiall: neither ought we to take euerie aduantage, for right lawe many tymes is right plaine wrong: neither must ye, bee to slacke on the other side, for too much gentleness many times makes a man the worst. And therfore it is good if the Farmer be

The letting
of a Farme.

The first booke entreating

be slacke in his paymentes, to make hym to knowe it: but in no wise to be a rapser or enhaunter of rentes, for that discomfortes, and many times vndoeth the Tenaunt. Moreover, you must not lightly change the old Farmer, both because of his desertes, and that he is better acquainted with the ground then a newe. *Volusus* would alwayes say, that he was in best case for his lands, that had alwayes his Tenautes borne and bred vp in them, wherby the long familiaritie shoulde make them more louingly to vse them selues: for sure it is an euill vse often to change Tenautes, and therfore I doo like well that order, where the land is let for the liues of the Tenaunt, his Wyfe, and his Chylde, paying a peereley rent, so that as long as hee payes his rent, and keepes the reparation, it shall not be lawfull to deceiue hym: for hereby the Tenaunt shall be prouoked to order the ground with more diligence, to repayre the house, & to looke to it in al pointes as to his owne, bestowyng many tymes as much as he hath vpon it. This way of letting lande mee seemes is best, where the ground is subiect to the Sea or the Riuer, or other daunger, that the Tenaunt bee charged with the maintenaunce of it. And here be sure that you let it rather to one of habilitie, then to an vnrhistic man that is not able to beare it, whereby you may loose both your land and your rent. In suche place as lyes neare the lord, he may occupie it by his Baylisfe, or to hauwes: but where it is farre of, it is better to let it out for a peereley rent vpon the foresayde couenautes. For if you occupie it with your seruantes, they wil either looke yll to your cattell, or your ground, or suffer thinges to be stolen, or to steale them selues, or make you be at more charges then needeth, and be carelesse in euery thing. In letting of ground commonly it is couenaunted, that the Tenant shall not let nor sell without leaue of the lord, and that he shall not breake any Pasture or Medowe lande, and what, and howe much he shall sowe of euery kind of grayne, howe much he shall haue for Pasture, howe much he shall let lye, and howe much he shall mend. Here haue you almost as much as I am able to say in husbundryng of the grounde.

R I G O. I thanke you, you haue greatly delighted mee with the describing of your Pasture ground and Carable.

The ende of the fyrst Booke.

The seconde Booke, of Gardens, Or- chardes, and wooddes.

Thrasybulus, Marius. Julia.

BEcause of the aliance betwixt Hearbes, Trees, and Corne, and because their husbandry is almost one, it is reason that next to the first booke, written of earable ground and tyllage, should folowe the description of Orchardes, Gardens, and their fruites. *Virgil* in writing of husbandry, left this part unwritten of: howe bee it, diuers others both olde and newe wyters haue not without some diligence written of this parte, but yet by snatches (as it were) and not thoroughly: whose opinions, ioyned with myne owne experience, it seemeth good to me in this booke to declare. And since the vse of Orchardes and Gardens is great and auncient, and that *Homer* writeth, howe *Laertes* the olde man, was woud with his trauayle in his Orchardes, to drie from his minde the sorowe he tooke for the absence of his sonne. And *Xenophon* reporteth, that King *Cyrus*, as great a prince as he was, woulde plant with his owne handes, and sette Trees in his Orchardes, in such order, as it seemed an earthly paradise. *Q. Curtius* writeth of *Abdolominus*, that for his great vertue, of a poore Gardener, came to be king of the *Sidoni-ans*. And surely, not unworthily is this part of husbandry esteemed, seeing it doth not alonely bring great pleasure, but also is greatly profitable for the maintenance of household, & the sparing of charges, ministring to the husband dayly foode and sufficient sustenance without cost. For when (as *Columella* saith) in the olde tyme the people liued more temperately, and the poore at more libertie fedde of fleshe and milke, and suche thinges as the ground and foldes yelded: but in the latter age when ryotte and daintinesse began to come in, and the wealthier sort to esteeme no fare but costly, and farre fetched, not content with meane dyet, but coueting such thinges as were of greatest price, the poore people as not able to beare the charges, were banished from the costlier cates, and driven to content them selues with the basest foode.

The vse of
Gardens of
great anti-
quitie.

The seconde booke entreatyng

An euill Gar-
den, token of
an ill huswife.

Or Lettusins.

foode. And hereof sprang at the first the planting of Orchards, and making of Gardens, wherewith the poorest creature that was, might store his Kitchin, and haue his victuals alwayes at hand, the Orchard and Garden seruing for his Shambles, with a greate deale more commendable & hurtlesse diet. Herein were the old husbandes very carefull, and vsed alwaies to iudge, that where they found the Garden out of order, the wyfe of the house (for vnto her belonged the charge thereof) was no good huswife, for they should be forced, to haue their victuals from the Shambles or the market, not making so great account of Colwoortes then, as they doo now, condemning them for the charges that were about them. As for fleshe, it was rather lothed then vsed amongst them. Only Orchards and Gardens did chiefly please them, because the fruites that they yecle, needed no fyre for the dressing of them, but spared wood, being alwaies of them selues redie dressed, easie of digestion, and nothyng burdensome to the stomack: and some of them seruyng also to powder or preserue withal, as good marchandise at home, as *Plinie* saith, not driuing men to seeke Pepper as farre as *Indy*. Of *Lucrin*, I y^e Disters not regarde, as the Poet sayth. And therefore to make them of more worthinesse, and that for their common profite they should not be y^e lesse regarded, there were diuers noble men of the house of *Valerius*, that tooke their surnames of Lettuse, and were not ashamed to be named Lettusins. The olde people had in greate estimation the Gardens of the daughters of *Aslas*, and of the kinges *Adonis*, and *Alcinou*, of whom *Homer* so much speaketh, as also the great vaulted Gardens, either built by *Semiramis*, or by *Cyrus* the king of *Assyria*. *Epicure* is reported to be the first that euer deuised Garden in Athens, before his time it was not seene that the pleasures of the Countrey were had in the Citie. Now when *Thrasylulus* traauailing in y^e affaires of his Prince, chaunced to come to the house of *Marius*, & carried by hym into a Garden that he had, whiche was very beautifull, beyng ledde about among the sweete smelling flowres, and vnder the pleasant Herbers, what a goodly sight (quoth) *Thrasylulus* is here: how excellently haue you garnished this paradise of yours with all kind of pleasures: Your Parlers, & your banquetting houses
both

bothe within and without, as all bedecked with pictures of beautifull Flowers and Trees, that you maie not onely see your eyes with the beholding of the true and lively flower, but also delight your self with the counterfait in the midst of Winter, seeing in the one, the painted flower to contend in beautie with the verie flower: in the other, the woonderfull worke of Nature, and in bothe, the passing goodnesse of GOD. Moreover, your pleasaunte Herbers to walke in, whose shadowes keepe of the heate of the Sunne, and if it fortune to Raine, the Cloisters are hard by. But specially this little River with most cleare water, encompassing the Garden, doeth woonderfully set it forth, and here withall the greene and goodlie quickset Hedges, ne chargeable kinde of enclosures, differeth it bothe from Man and Beast. I speake nothyng of the well ordered quarters, whereas the Herbes and Trees are seuered euery sort in their due place, the Plot herbes by them selues, the flowers in an other place, the Trees and Impes in an other quarter, all in iuste square and proportiō, with Alleis and walkes amongst them. Among these goodlie sightes, I praie you remember accordyng to your promise (for so the tyme requireth) to shewe me some parte of your greate knowledge in Garden matters, sith you haue vpon this condition heard me heretofore garbling, or rather weariyng you with the declaimyng of my poore skill in the tellyng of the feede.

MARIVS. Your memorie is herein a little to quick, but what shall I doe? promise must be kept, and since you will needes force me, you shall heare me babble as well as I can, of my knowledge in Gardenyng: but not with the like pleasure that I heard you talkyng, of your graspyng and your ground.

THRA. Yes truly, with as greate pleasure and desire as maie bee.

MARIVS. Come on then, let vs here sitte doune in this Herber, and we will now and then rise and walke, restyng vs as oft as you will: in the meane time *IVLIA* shall make redy our supper. And first, euen as you began with the choosyng of a place meete to set your house vpon, so must I with the choise of a Plot meete for a Garden. The ordyng of Gardē is diuers, for some are made by the Hamour houses, some in the Suburbes, some

The second booke entreatyng

in the Citie where so euer thei bee, if the place will suffer, thei muste bee made as neare to the house as maie bee: but so, as thei bee as farre from the Barnes as you can, for the Chaffe or dust blowyng into them, and either subiecte to the Dounge heape, whereby it maie be made riche, or els in some verie good ground that hath some small Brooke runnyng by it, or if it haue none suche, some Well or Condyte, whereby it maie bee watered. An excellent plot for the purpose is that whiche declineth a little, and hath certayne gutters of water runnyng through diuers partes thereof: for Gardens must alwaies be to be easily watered, if not with some runnyng streame, some Pompe to be made, or Kettle, Mill, or suche like, as maie serue the turne of a naturall streame. Columella would haue you make your searche for water, when the Sunne is in the latter part of Virgo, whiche is in September, before his entrance into the Winter Equinoctiall, for then maie you best vnderstande the strength or goodnesse of the springes, when after the greate burnyng heate of the Sommer, the ground hath a long while continued without rain. If you can not thus haue water, you must make some standyng Pond at the vpper part of the ground, that maie receiue and containe suche water as falles from aboue, where with ye maie water your Garden in the extream heate of the Sommer: but where neither the nature of the soile, nor conueiance by Condyte or Pompe, or runnyng streame is to be had, you haue no other helpe but the Raine water of winter, which if you also haue not, then must you delue and laie your Garden three or fower foote deepe: whiche beeyng so ordered, will well bee able to abide what so euer drought doe happen. This is also to be regarded, that in Gardens that are deftite of water, you so order them into seuerall partes, that what parte you will occupie in Winter, maie lye toward the South; and that whiche shall serue you for Sommer, maie lye towardes the North. In a Garden, as in the choise of Corne grounde, you must looke whether the goodnesse of the ground be not hindered by the vnkilfulnesse of hym that hath occupied it. You must also make choise of your waters, of whiche the best (as Plinie saith) are the coldest, and suche as bee sweete to drinke: the worst that comes from Ponds, or is brought in by Trenches, because thei
byng

The tyme of
searchyng for
water.

byng with the the seedes of Grasse and weedes: but the ground doeth moſte delight in raine water, whiche killeth Wormes and haggage that breedes in it: but for ſome Verbes, Salte water is needefull, as the Raddiſhe, Beete, Rewe, Saurell, to whiche all ſalt water thei ſaie, is a ſpeciall helper, makynge them bothe pleaſant and fruitfull to all others, ſweete water is onely to be uſed. And becauſe I haue begun to entreate of watryng, I muſt giue this note, that the tymes of watryng is not in the heate of the daie but early in the mornynge, and at night, leaſt the water be heated with the Sunne: onely Baſill you muſt water at noone, the ſeede ſowthynge will come the ſoner by, if thei be ſprinkled at the firſt with hotte water. You haue here heard, that the firſte needefull thyng for a Garden, is water. The nexte to that is enclosure, that it be well enclosed, bothe from unruly folkes and theues, and likewiſe from Beaſtes: leaſt lyng in waite for your Herbes and your Fruites, thei maie bothe bereaue you of your paines, and your pleaſure: for if either thei bee bitten with Beaſtes, or to often handeled with Ven, it hindereth them bothe of their grouthe and ſeedynge: and therefore it is of neceſſitie to haue the Garden well enclosed. Now for encloſures, there are ſundry kindes, ſome makynge earth in mould doe counterſeite Brickwalles: Others make them of Lime and ſtones, ſome others of ſtones laied one vpon an other in heapes, caſtyng a ditche for water rounde about them, whiche kinde *Palladius* forbiddes to ſolow, becauſe it will drawe out the moiſture fro the Garden, except it be in Harriſhe ground. Other make their fence with the ſeedes and ſettes of Thorne: ſome make them of mudde walles couered with ſtrawe or Heath. *Varro* maketh mention of ſower kindes of enclosure, the firſt naturall, the ſeconde wilde, the third Souldierly, the fourth, of Carpenters worke. The firſt and naturall is the quickſet Hedge, beeyng ſet of young Thornes, whiche once well growen, regardeth neither fire nor other hurte. The ſeconde is the common Hedge made of dead wood, well ſtaked and thicke plaſhed, or railde. The thurde the Souldiers fortefyng, is a deepe ditche with a rampier: but the ditche muſt be ſo made, as it maie receiue all the water that comes fro about, or falles into it, wherein the ſamure muſt be ſo ſteepe, that it maie not eaſily be climed.

wormes killed
by raine water

The tyme of
watryng of
Gardens.

Encloſyng of
Gardens.

C. ii.

This

The second booke entreatyng

The making
of a quickset
Hedge.

This kinde of fence is to bee made, where the ground lies nere the hie waie, or buttes vpon the Riuer, of which sort I shall haue occasion to speake moze hereafter. The fourth fence made by the Carpenter or by the Mason, is commonly knowen: wherof there is fower sortes, either of Stones, or of Bricks, of Turfe, and Earth, and little stones framed in moulde. *Columella* followyng the auncientest aucthours, preferreth the quickset Hedge before the deade, bothe because it is lesse chargeable, and also endureth the longer, continuynge a long tyme: whiche Hedge of yong thornes, he teacheth to make in this sort. The place that you determine to enclose, must after the beginning of September, when the ground hath been well soaked with raine, be trenched aboute with twoo furrowes, a yard distant one fro the other, the deapth and breadth of euery one of them must be twoo foote, which you must suffer to lye emptye al winter, providing in the meane tyme the seedes that you meane to sowe in them, whiche must bee the berries of sharpe thornes, Briers, Holly, and wilde Eglantine, whiche the Grekes call *κνυόβριον*, dogge Brier. The berries of these you must gather as ripe as you maie, and mingle the with the floure or meale of Tares, whiche when it is sprinkled with water, must be put vpo old ropes of shippes, or any other ropes, the ropes beyng thus handled and dried, must be laied vp in some boorded floore. After ward when Winter is doen, within fower tie daies after, about the comyng of the Swallowe, if there be any water remainyng in the furrowes, it muste bee let out, and the mellowed earth, whiche was cast out of the furrowes in the ende of Sommer, must now be cast in againe, till you haue filled the by to the middelt: then must you handsomely vnfold the rope, and laie the in length through bothe the furrowes, and so couer the, takyng good heed that you throwe not to myche earth vpo them for hinderyng the spryng, whiche commonly vseth to appere within thirtie daies after, and when thei be growen to bee of some height, thei must be made to encline to the space betwixt the twoo furrowes: in whiche space you must haue a little walled Hedge, to teach the sprynges of other furrowes to climbe by, which will be a iolly staie and a comfort to them. But I haue another and a moze reuer waie of makyng of them, which you first practisynge

practisynge in this Countrey, diuers others haue folowed. I also doe make a certaine Ditch, and gatherynge in the Wood the young Sprynge of Thornes, cuttyng of their toppes, I set them on the bancke of the Ditch, so that thei stande halfe a foote out of the ground, pluckynge by all the weedes (specially the first Sommer) that growe aboute them, and sucke awaie the iuice that comfortes the set. The rootes beyng thus ridde. I couer all the earth about them with strawe, whereby both the dewe of the night is let into the rootes, and the poore plant is defended from the burnynge of the Sunne. The yere after, I make a little scender raile of Houles, wherevnto I laie by the sprynges, weaynyng them in suche sorte as I will haue them to growe, whiche I peerelely make higher, according to the height that I would haue the Hedge to sprynge. Eight, or at the uttermoste nyne foote, is a sufficient height, and what so euer sprynge aboue, must bee plasshed of one side or the other, to make the fence the stronger. When I haue thus doen, I make it thicker and thicker euery yere, fillynge by the places where I see it thynne, with suche bowes as I see growe out of order: and thus is it wouen so thicke with peerelely bindynges, that not so muche as a small birde is able to passe thorow it, nor any man to looke through it. When it is thicke yepynough and bigge yepynough, the superfluous sprynges must euery yere be cutte. This Hedge can neuer be destroyed, excepte it bee plucked by by the rootes: neither feareth it the hurte of fire, but will growe the better for it. And this is my waie of enclosynge a Gardē, as the pleasantest, moste profitable, and of least charges.

THRA. There is an other waie of makynge of a quickset Hedge, whiche our Hedgers in the Countrey doe vse, whiche is some thynge the stronger. For settynge the young settes, as you haue saied before, when they be growen to some greatnesse, thei cut the Thorne neere to the ground, and beyng halfe cutte and broken a sonder, thei bowe it along the Hedge, and plashe it. Fro these cuttes sprynge by newe plantes, whiche still as they growe to any highnesse, thei cut them, and plashe them againe: so doyng continually, till the Hedge be come to his full height. This waie the Hedge is made woonderfull strong, that neither Dogge nor other beast, is able to bryake through it: but the other is a greate

An other newer and better way of making a quickset hedge.

Note this way of quick setting

An other sort of hedging.

The second booke entreatyng

deale more pleasaunt to the eye. But if I haue not settes enough to serue, maie I make an Iunpe Garden of their seede:

MARIVS. Dea verie well. Make your Thorne Garden or store pldt in this sort. Take your Berries or stoues, and mingle them with earth, laie them vp for the first yere in some place meete for them, the next yere sowe them as thicke as you can, and ye shall within a litle tyme haue a whole wood of Thornes.

THRA. You haue now spoken of Water and enclosure, twoo principall pointes in a Garden: It now remaineth for you to speake of the grounde meete for a Garden, and of the order of dressyng of it.

MARIVS. Of the sundrie sortes of grounde, and of the discernyng of them, because you in your describyng of Come ground before haue sufficiently spoken, I doe not thinke it needfull for me to repeat it. Againe, it is yenough to me to adde onely this, that the grounde ought not to be too riche, nor too leane, but fatte and mellowe, whiche byngeth forth a small kinde of Grasse like heares: suche grounde requyres least labour, the stiffe and the riche grounde asketh greater paines aboute it, but doeth recompence it again with his fruitfulnessse. The stiffe, leane, and colde grounde, is not to be medled with, as *Columella* writeth in appointyng good grounde for Gardens.

The grounde that giues the ripe and mellowed moulde,
And doeth in working cromble like the Sandes.

That of his owne good nature yeeldeth manifolde,
Where Waluore with his purple berrie standes:

For neither doeth the grounde that still is drie,
Content my minde, nor yet the watry soile,

Whereas the Frogge continually doeth crie,
While in the stincking Lakes he still doeth moile.

¶ I like the lande that of it self doeth yeelde,
The mightie Elme that braunches broad doeth beare,
And rounde about with Trees bedeckes the feelde,
With Trees, that wilde beares Apple, Plome, and Peare,
But will no Berfoote breede nor stincking Gumme,
Nor Yewe nor Plantes, whence deadly poisons come.

And

Quere loru,

Folio 20

And this muche of the Garden ground, whiche as I saied, is watrede, or maie be watrede, and is enclosed either with a Wall, a Hedge, or some other safe enclosure. After this, it is needefull it lye well to the Sunne, and warme: for in grounde that is verie cold, the warmth of the Sunne wil not muche auaille it. And contrarie, if it bee a hotte burnyng Sande, the benefite of the Heauens can little helpe it. You muste yet looke, that it lye not subiecte to ill Windes that are drie and scorchyng, and byng frostes and Mistes. But nowe to the orderyng of your Garden. Firste, you must bee sure that the grounde whiche you meane to sow in the Spring, be well digged in the fall of the lease, about the kalendes of October: and that whiche you Garden in the fall of the lease, muste bee digged in Maie, that either by the colde of Winter, or the heate of Summer, bothe the clodde maie be melowed, and the rootes of the weedes destroyed, nor muche before this tyme muste you dounge it. And when the tyme of sowyng is at hande a fwe daies before, the weedes must be got out, and the dounge laied on, and so often and diligently muste it bee digged, as the grounde maie bee thoroughly medled with the moulde. Therefore the partes of the Gardens must be so ordered, as that whiche you meane to sow in the ende of Sommer, maie be digged in the Spring: and the part that you will sow in the Spring must be digged in the ende of Sommer: so shall bothe your fallowes be seasoned by the benefite of the colde and the Sunne. The beddes are to bee made narrowe and long, as xii. foote in length, and sixe in breadth, that thei maie be the easier weeded: thei must lye in wette and watrie grounde twoo foote hie, in drie grounde a foote is sufficient. If your beddes lye so drie, as thei will suffer no water to tarry vpon them, you must make the spaces betwixt hier, that the water maie bee forced to lye and auoide when you will. Of the kindes and fortes of dounyng, beeyng sufficientlie entreated of by you, I will saie nothyng: onely addyng this, that the dounge of Alles is the best, because it breedeth fewest weedes: the nexte is Cattelles dounge, and Sheepes dounge, if it haue lien a yere. The grounde as I saied whiche we meane to sow in the Spring, we must after the ende of Sommer let lye fallowe, to be seasoned with the frost and the cold: for as the heate of So-

What to be considered in the choise of Garden ground.
Ayre.
Windes.

The orderyng of Gardens.

Nota:

Beddes.

Of digging and dounyng of Gardens.

The second booke entreatynge

mer, so doeth the cold of the Winter bake and season the ground. When Winter is doene then must wee begimme to dounge it, and about the fowerteenth or fifteenth of Januarie, wee must digge it againe, deuidyng it into quarters and beddes. Firste must the weeddes bee plucked vp, and turffes of barraine ground must bee laied in the Alleis, whiche beynge well beaten with Beetles, and so trode vppon, that the Grasse bee worne awaie, so that it scarce appeare, it will after springe by as fine as little heare, and yeld a pleasaunt sight to the eye, whiche will be very beautifull. When you haue seuered your flowers by them selues, your Physicke Hearbes by them selues, and your Potte hearbes and Sallettes in an other place, the beddes and the borders must be so caste, as the weeder's handes maie reache to the middest of them, so shall thei not neede in their labour to treade vppon the Beddes, nor to hurte the hearbes. And this I thinke sufficient for the preparynge of your grounde before the sowynge. Now will I speake of sowynge, and what shalbe sowed in euery season. To speake of all sortes of hearbes & flowers, were an endlesse labour, onely of those that are mooste needefull, I meane to entreate. And firste of hearbes, some are for the Potte, some for the sight, some for pleasure and sweete sauour, and some for Physicke. And againe, some are for Winter, some for Sommer, and some betwixte bothe. The firste tyme of sowynge after Winter, is the moneth of Marche, Aprill, and Maie, wherein we vse to sowe Colwoortes, Radish, Rape, and after Beetes, Lettuse, Sorrell, Mustardeseede, Coriander, Dill, and Garden Cresses. The second season for sowynge, is in the beginnyng of October, wherein thei set Beetes, and sowe Smalage in *Nigella* and *Arreche*. The third season, which thei call the Sommer season, in some place the Gardners begin in Januarie, wherein thei set Cucubers, Gourdes, Spinnahe, Basill, Purslane, and Sauerie. Many thynges maie bee sowed betwixt these seasons, and yet doe verie well. All Garden hearbes are comonly sowed before the tenth of Iune, suche thynges as you would not haue seede, you may sowe after this time. Some thynges are sowed onely two times a yere, in the spring, and in the ende of Sommer. Others againe at sundrie times, as Lettuse, Colwoortes, Rocket, Radishe, Cresses, Coriander, Cheruill,

Of sowing.

Three seasons
so sow in.

Cheruill, and Dill. These are sowed aboute Marche, or aboute September, and *Columella* saith, doe come either of the seede, or of the slippe: some of the Roote, some of the stalke, some of the Lease, some of the Clot, some of the Head, some of bothe: others of the Barke, others of the Pith, some, bothe of the seede and the slippe, as Rewe, wilde Parierum, and Balsill, this thei cutte of, when it comes to be a handfull hye: Others growe bothe of the Seede and the Roote, as Onions, Garlike, and suche like. And although all thynge will growe of their seedes, yet this thei saie, Rewe will not doe: for it verie seeldome sprynges, therefore thei rather set the slippes. These that are set of the Roote, doe commonly laste longer, and braunche better, puttyng forth the young slippes fro his sides, as the Onion and Gith. The stalke beeyng cut, thei all doe spryng againe for the moste part, except suche as haue speciall stalkes, called *Theophrastus* $\alpha\pi\ \delta\kappa\alpha\upsilon\lambda\alpha$, that is, suche as when the stalke is cutte, growe no more: *Gasa* interpretes it *Secaulia*. The Rape and the Radishe, their leaues beeyng pulled awaie and couered with earth, doe growe and continue til Sommer. The frutes of some is in the earth, some without, and some bothe within and without, some lye and growe, as the Cucumber and the Gourde, and sometymes hang, though of greater weight by muche then the frutes of trees: some require stayes and helpes to clime by, as Hoppes, Lupines, and Bease: some seede groweth better. The newer thei be, as Leekes, *Nigeba Romana*, Cucumbers, and Gourdes, and therefore some vse to steepe their Cucumbers in Milke or Water, to cause them to growe the speedelie. On the other side, of old seede better groweth the Beete, Garden Cresses, Penitriall, greate Parierum, and Corriander. In the Beete this is onely obserued, that the seede commeth not all by in one pere, but part the seconde pere, and some the third: and therefore of a greate deale of seede, spryngeth but a little. Touchyng seede, this is to be well seen to, that thei be not to old and drie; that thei bee not mingled, or taken one for an other: olde seede in some is of suche force, as it chaungeth the nature: for of old Colwoorte seede spryngeth the Rape, and likewise of Rape seede Colwoortes. Also, that ye gather not your seedes to soone, nor to late. The verie tyme, as *Theophrastus* writeth,

Of seedes.

Steepe seedes
in milke or water
to make them
growe sooner

postea 56 b

The second booke entreating

What seede
spring soone
and whiche
slowly.

The weather
for sowing.

The Moone

The time for
gardning

writeth, is at the Spring, the fall of the leafe, and the rising of the Dogge: but not in all places and kindes alike. Of seedes, the sonest that spring are these, Basil, Arach, Rauens, Rocket, that cometh by the third daie after the sowing, Lettuse the fourth daie, the Cucumber and the Gourde, the fifth daie, Parflin longer ere it come, Dill the fourth daie, Cresses, and Mustardseed the fifth daie, Beetes in Sommer, the sixth daie, in Winter the tenth or the twelfth, Leekes the xix. daie, sometyne the xx. Coriander later: whiche if it bee netwe (except it bee thrust together) it groweth not at all. Peneriall, and greate Harierom, come up after thirtie daies. Parfely, of all other the longest before it come up, apperyng the fourtieth daie after, or many times the fiftieth. You must also consider, that the weather in sowing is of greate force: for the season being faire and warme, thei come up the sooner. Some sortes seede one yere, and neuer after come up: some againe continue, as Parfely, Smalledge, Leekes, Nigella, that being once sowed, come up every yere. Suche as continue but a yere, presently upon their seedynge dye: other spring againe after the losse of their stalkes, as Leekes, Nigella, Onions, and Garlike: and commonly all suche as put out from the side: and all these require doungeyng and watryng. In sowing beside, some thinke you must haue regard to the Moone, and to sowe and sette in the encrease, and not in the wane. Some againe thinke it beste from that she is sower daies olde, till she bee eightene: some after the thirde, others from the tenth, till the twentieth: and beste (as thei all suppose) the Moone being alofte, and not sette.

THRA. But now I praye you tell vs somthyng of the orderynge of the best Garden hearches you haue.

MARIVS. Some deuide their Gardenyng tyme by the Monethes, as thei doe their other housebandrie.

THRA. I care not whether by Monethes, or other waies, but I would faine knowe the orderynge of your Garden here: for I knowe in hot countreies thei garden all the Winter long, but I am altogether for our countrie, whose order we must here follow.

MARIVS. In these partes thei commonly begin their Gardenyng (if the weather bee faire and seasonable) in the ende of Februarie. At this tyme therefore the Garden beeyng doun-
ged,

ged, digged, raked, and cleansed, thei vse to plante Sperage, and Rewe.

THRA. I praie you beginne with *Asparagus*, or *Sperage*, and the other pot hearbes, euery one in his order, and afterward with flowers, and Whisicke hearbes.

Of pottle
hearbes.

Asparagus.

MARIVS. *Asparagus* was wonte to growe wilde, but now is brought into the Garden, it is called in Greeke ἀσπάραγος in Italian, Spanishe, and Frenche, it is almoste all one, the one calling it *Asparago*, the other *Asperge*, the Dutche men call it *Sperages* and *Spiritus*, because it comes vp of it self: For the Garden *Sperage* thei were not acquainted with. It is planted in twoo sortes, either of the Seede, or the Roote. Thei take of the Seede as muche as you maie take vp with the fingers, and bestowynge it in little hooles, euery twoo or three Seedes half a foote a sinder: thei set them in ritche grounde in Februarie, and couer the ground with dounge. The weedes that growe, must be well plucked awaie, after the fourtieth daie thei come vp as it were to one roote, and tangled together, the rootes haue sundrie long threedes, whiche thei call the *Sponge*. In grounde that is drie, the seedes are to be set deepe, and well cōpered with dounge. In wette groundes on the other side, thei are to beset shallowe in toppe of the borders, lest the moisture destroie them. The firste yere you must breake of the stalkes that growe, for if you plucke them vp by the rootes, the whole settes will followe, whiche are to be preserued for twoo yere with doungeyng and weedyng. All the yeres after, you must not gather them in the stalke, but pulle them from the roote, that the rootes beyng opened maie the better spryng, whiche except you doe, you hurte the Spryng. Whyn that you meane to keepe for seede, you muste in no wise meddle withall, after, burne by the busshes, and in Winter dounge well the rootes with dounge and ashes, thei are planted also of the rootes, whiche after two yeres you must remoue into a warme and well doungeed grounde. The trenches where you meane to sette the, must stande a foote a sinder, and a shaftman in depth, wherein you must so laie your spōges (as beyng couered) thei maie best growe: but in the spring before thei come vp, you muste loose the earth with a little Fork, to cause them the better to spryng, and

to

The second booke entreating

to make the rootes the greater. *Cato* would haue you to rake them, but so, as you hurte not the Rootes, and after to pull the Plante from the Roote: For if you other wise breake, the Roote will dye, and come to nothyng. But you maie so long crosse it, till you see it beginne to growe to seede: in whiche yere for the Winter tyme, you muste accordyng to *Catoes* mynde, couer it with strawe, or suche like, least the colde doe kill them, and in the Spring open it againe, and dounge it well. Some thinke, that the first yere it is needelesse to doe any thyng to the Plant, but onely to weede it. From the Rootes, whiche they call the Sponges, there spryngeth firste certaine buddes with croumpled knoppes, verie good and pleasaunte for Sallettes: whiche if you suffer to growe, it straight bussheth forth with braunches like *Fennell*, and at length growe to be pyckly: after it hath floured, it beareth a Berrie, firste greene, and when it is ripe, redde. If you would haue Sallettes of *Asparagus* all the yere through: whe you haue gathered the Berries, open the Rootes that runne alofte by the ground with diggynge, and you shall haue the rootes sende forth newe buddes out of hande. It is thought, that if you breake to powder the horne of a Ram, and sowe it, watryng it well, it will come to be good Sperage. In the Spring tyme thei make a verie good Sallet, being sodde in water, or fatte brothe, till thei be tender: For if you seethe them to muche, thei will waste awaie. When thei be sodde, thei dresse them with Vineger, Oyle, Pepper, and Salte, and so eat them: or as my freend *William* that verie skilfull in these matters telleth me, thei cut them in small peeces like *Dise*, and after thei haue parboiled them, butter them with sweete butter, a little Vinegar and Pepper.

THRA. You haue verie well shewed me the orderynge of *Asparagus*, I praye you goe forward to *Rewe*.

MARIVS. *Rewe*, whiche the Greekes call *πύλονον*, the Latines *Rut.am*, the Italians *Rutache*, the Spaniards *Ruda*, the Frenchmen *Rue de garden*, is planted at the ende of Februarye or in March, prosperynge best in drie and Sunnie groundes, it abhorreth bothe water and dounge, whiche all other herbes moste delight in, it most delighteth in ashes: and where all other plates will spring of the seede, this thei saie will neuer do it.

The

The braunches beyng slipped of, and set in the Spring, will berie well growe, but if you remooue the old roote, it dieth: it delighteth in the shadowe of the figge Tree, and beeyng stolne (as thei saie,) it prospereth the better: it is sowed with cursyng, as Cummin, and diuers other, and can not abide the presence of an vnclane woman.

THRA. I see goodlie Lettuse here, I praie you how doe you order it?

MARIVS. Lettuse is called in Dutche Lattich, in Lettuse. Frenche *Laitue*, in Greeke *βούλαξ*, in Italian *Lactuca*, and so in Latine, in Spanishe *Lechugas*, whereof besides the wilde, there are three kindes, one croompled, whiche *Columella* calleth *Cacilia*, and Spanishe Lettuse, of the countreis where it moſte groweth, and is greatestt esteemed, in Dutch called *Krauser Lattich*, in French *Cressue*, the other Cabbedge Lettuse, in Dutch *Knopf Lattich*, in French *Laitue testue*, of *Plinie* called *Laconica*, and *Sessilis*, because it groweth rounde like an head, or a pple. The third sorte is called *Rorunda*, because it groweth in compassse vpon the grounde.

THRA. But how comie you to haue so good Lettuse, and how doe you order them?

MARIVS. At the ende of February, or in the beginning of Marche, we vse to sowe it, that it maie be remoued aboute Aprill or Maie. In hotte countreis as *Palladius* telleth, thei sowe it in Ianuarie, or in December, with intent to remoue it in February: but you maie sowe it at any tyme of the yere, so the grounde be good, well dounge, and watred. When you remoue them, the rootes must be pared and rubbed ouer with dounge, and suche as be already planted, their rootes must be bared and dunge: thei loue a good ground, moſte & well dounge, thei spread the better (if you set by them the Rape) or when thei beginne to stalk, the stalke beyng tenderly clouen, you laie vpon it a clodde or a tile sharde: thei will be white, if you sprinkle the often with sande, or tye sande within the leaues, and bothe tender and white you shall haue them. If twoo daies before thei be gathered their toppes bee tied vp, thei will bee rounde and Cabbedged: If the roote beyng remoued when it is growen a handbode in height,

This way to make
excellent good
white Lettuse
letting.

The second booke entreating

bee paved and spered with freshe Cowe dounge, and earth caste aboute it, bee well watered, and when it groweth hye, the toppe bee matted, a potsharde laied vpon it, the sweeter also thei will bee, the more you restrain the stalkes from shootyng vp, whiche must as I saide, bee kepte downe with some stone or weight, that thei maie spreade the better. If the Lettuse chaunce by reason of the hardnesse of the soyle, the seede, or the season, to warre hard, the remouyng of it will byyng it againe to his tenderneesse will haue sonderly and diuers tastes, it takyng a Tredde of Sheepe, or Goates dounge, and hollowyng it cunnyngly with an Aulle or a Bodkin, you thurst into it the seede of Lettuse, Cresses, Basil, Rocket, Smalage, Doreely, and Radishe, and after wyppynge it in dounge, you piete it into verie good grounde, and water it well. The Doreely, or Smalage groweth to roote, the others growe in heiboth, keepyng still the taste of euery one. *Constantine* affirmeth Lettuse to be a moiste and a colde hearbe, a quencher of thirst, and causer of sleepe, and that beyng boyled, it nourisheth moiste, and abaceth Lecherie, for whiche the *Pythagorians* doe call it *Eunuchion*. *Galen* hym self, the Prince of Physicians, doeth greatly commend it, who in his youth did alwaies vse to eate it rawe, and after in his elder yeres boyled, whereby he kept his bodie in good temperature. *Endiue*, in Latine *Intubum*, or *Intubus*, not vnlike to Lettuse, some call it Garden Succorie, the Dutchemen and common sorte *Endiuia*, the Italians and the French *Cicorium*, the Spaniards *Endibia*, it is sowne as other Garden hearbes in March, it loveth moiste, and good earth, but you muste make your beddes when you sowe it the flatter, least the earth fallyng awaie, the rootes bee bared: when it hath put forth the fower leaues, you muste remoue it vnto well doungeed grounde, that whiche is sowne before the kalendes of Iulie, doeth come to seede, but that which is sowne after, seedeth not. You muste sowe that whiche you would haue to serue you in Winter in October, in warme stonie places for Sallettes in Winter, thei vse at this daie when his leaues bee out, to fold the by together, and tye them rounde in the toppe with some small thing, coueryng them with some little earthen vessel, the rootes still remaining to nourishe them withall: thus doyng, thei will growe

Endiue.

growe to be white and tender, and to loose a greate parte of their bitternesse. It is saied, that thei will be white, if thei be sprinckled a fewe daies abroade, and lying vpon sande, bee washed with the raine: And thus is Endiue with his encrease preserved all Winter. Some there be, that contentyng themselves with lesse charges and labour, dooe onely couer them with earth, others againe with strawe: this order of Wintering of it, is now in euery place growen to be common.

THRA. I see also in this pleasaunt Garden Colwoortes, Colwoortes, that we Countrey folkes be so well acquainted with.

MARIVS. It is meete my Garden should wante that, whiche as you knowe *Cato* preferreth before all other hearbes, in describving the wonderfull properties and vles thereof: and this place I onely appoint for suche common hotte hearbes, as Colwoortes, Bectes, Endiue, Onions, Rapes, Nauiens, Leekes, Carrettes, Raddishe, Garlecke, and Parsnappes: the worthier sorte I place by them selues, and as the nature of euery one requireth. Colwoortes is commonly called in Latine *Brassica*, or *Caulis*, in Greeke *καυλι*, in Frenche *Choux*, in Italian *Caule*, in Spanishe *Verza*, in Dutche *Koil*. The olde writers made diuers sortes of it, as at this daie there be. One sort with great and broad leaues, a bigge stalke, and verie fruitefull. This sorte is commonly knowen, whiche beeyng the pleasaunter in Winter, when it is bitten with the frostes, is sodde with Baken, and vley in Porredge. The tender parte of the toppe beyng a little boiled, is scrud for sallettes, dressed with oile and salte. The second sort with the crumpled leafe, of the resemblance that it hath to Smalage, is called *Selinocis* or *Apiaria*, of the common people crumpled Col, or wrinkled Col. The thirde sorte whiche is properly called *Crambe*, hath a smaller stalke and leafe, smooche, tender and not very full of iulce. The fourth sort is the great Cabbedge with broad leaues and a greate head, called in Ditch *Rappes*, in Frenche *Choux Cabuz*, of the old writers *Trutina Brassica*, and this kinde is onely moste set by. In Germanie there is one kind of them that thei call *Lunbarde Colwort*, or *Sauoy Colwoorte*, sweeter then the other, and not able to endure the Winter; and an other with verie broad leaues crumpled, and full of wrinkles,

The second booke entreatyng

winckles, but a greate deale blacker, whiche the Italians call *Nigrecanles*, and the Latines *Nigra Brassica*, of the number of those that thei call comunonly redde Coll, of the olde wyters *Marucina Brassica*. There are besides other sortes, taking their names of the Countrey where thei growe, as *Aricina* and *Cumana*. The beste tyme for setting and sowyng of Colwortes, is after the Ides of Aprill. In cold and rainie Countreys, the oftener it is dunged and raked, the better a greate deale will the Colwortes be: some vse to sowe them about the Kalends of Marche, but then the cheefest of it goeth out in lease, and when it is once cutte, maketh no good stalke for the Winter after: yet maie you twice remoue your greatest Col, and if you so doe, you shall haue bothe more seede, and greater yeeld: for it so aboundeth with seede as it is sowed with no lesse aduantage then Rape seede. For the makyng of oile, Colwortes maie be sown all the yere long, but cheefly in Marche after it is sowed, it appeareth within ten daies, except your seedes be old and drie, for old seede will growe to Rapes, as old Rape seede will to Colwortes. Some saie it prospereth beste in Salt ground, and therefore thei vse to caste vpon the ground Salt peter or Ashes, whiche also destroyeth the Caterpillar: it is remoued in Iune, chiefly when it hath put forth sixe leaues, and that when the weather is Rainie, so that you couer the roote before with a little freshe dounge, and wrap it in seaweede, and so set it. More diligence is to be used aboute the Cabbedge: it must be sown in Marche in the full of the Moone, that it maie remaine in the grounde twoo Moones, and in Maie you muste take them vp, and sette them againe twoo foote a sunder. The grounde muste bee well digged where you set them, and as fast as thei growe, the earth muste be raised aboute them, so that there appeare no more then the verie toppes of them: for to cause them to growe faire and greate: you must as ofte as you remoue them, banke them vp with earth aboute them, that nothyng but the leaues appeare. And thus you must often doe to al the kindes of them, the hoare Frostes make them haue the greater sweetnesse. The Vineyardes (thei saie) where Colwortes growe, doe yeelde the worst Vines, and the Coll corrupteth the Wine,

T H R A. I praye you proceed with y rest of these pot herbes.

MARIVS.

Alca 53

Cabage

M A R I V S. You see hereby Spinage, so tearmed (as you may knowe) of the prickly seedes, called in Latine *Spinacia*, and euen so in Italian, Spanishe, Frenche, and Dutche: it is sowed as those before, in Marche, Aprill, and so tyll September: if it may bee well watred, it commeth vp in seuen dayes after the sowynge, you shall not neede to remooue it. The seede must presently after the sowynge be couered, and after ward well weeded: it refuseth no kinde of grounde, but prospereth in euerie place, you must often cut it, for it continually groweth, it is to be boyled without any water, where in the boyling it doth yeele greate store of iuyce, and contenting it selfe with his owne liquour, it requireth none other. Afterwarde, beeyng beaten and stirred with the Ladell, till the clamminesse be gone, it is made vp in little balles, the iuyce straped out and boyled vpon a Chafin-dishe with Oyle or Butter, some adde thereto Clergus, or the iuyce of soure Grapes, to make the taste moze tarte. If ye wou in order as you see, all mye Kitchen hearbes, now followeth Sorrell, called in Latine *Acrisa*, in Italian likewise, in Spanishe *Romana*, in Frenche *Oxella*, in Dutche *Sorick*, of the sowyer therof. There are sundry sortes of it, we haue at this day two kinde, the Garden Sorrell and the wyld, whiche are pleasant both in Broch and Sallettes, and of this hearbe the wyld sortes are both sowyer in taste, and smaller in leafe: it is sowed as all other pottage hearbes are, and it groweth of it selfe in Meddowes and Gardens. Cummin and Coriander require well ordered ground, they are sowed in the Spring, and must be well weeded. Cummin is called in Greeke *κυμινον*, in Latine *Cuminum*, and almost like in all other languages: it is sowed best (as they thinke, with cursynge and excretion, that it may prosper the better. Coriander called in Greeke *κοριανδρον*, in Latine *Coriandrum*, and in almost by the same name in all other tongues, dooth best prosper when it is sowed of seede that is oldest. Smalledge and Parsley called in Greeke *οξυανθον*, and also *Petroselinon*, in Latine *Aplum*, *Petroselinum*, and *Aplum hortense*, in Italian *Apio domestico*, and *Petrosello*, in Spanishe *Peterfillie* or *Peterlin*, it is sowed at the Equinoctiall in the Spring time, the seede beaten a litle, and made up in round pelletes:

Spinage.

Sorrell.

Cummin, &
Coriander.

Smalledge,
or parsley.

The second Booke entreatynge

Fenell.

Dyll.

Cheruille.

Beetes.

pellettes: we call it *Equinoctial*, when the night and the dayes are of equall length ouer all the worlde: that is, when the sunne, the captayne and aucthour of the other lightes, the very soule of the worlde, dooth enter into the signes of *Aries* and *Libra*. It is thought to prosper the better the older the seede is, and to spring the sooner: it commeth vp the fiftieth daye, or at the soonest the fourtieth day after it is sowed: when it is once sowed, it abideth a long tyme, it reioyseth in water or wette. Fenell in Greeke *μικροβον*, in Italian *Fenocchio*, in Spanishe *Hinazo*, in Frenche *Fenoil*, in Dutche *Fenchel*, is sowed in the beginning of the Spring in hotte sunny places, stony groundes, or any groundes: beyng once sowed, it springeth euery yeere. Annise in Greeke *ἀνισον*, in Latine *Anisum*, so knowen in most tongues, as Cummin, and Coriander, requirerh a ground well ordered and dycted. Dyll in Greeke *κνιδον*, in Latine *Anethum*, in Frenche and Italian almost so, in Spanishe *Eneldo*, in Dutch *Dyll*, endureth and abideth all kinde of weathers, but delightes most in warme ground: if it be not well watered, it must be sowed thinner. Some neuer couer the seedes when they sowe them, supposing that no Birde will medle with it, it commeth vp also of it selfe as Fenel doth. Cheruyl in Greeke *χαιρόφυλλον*, in Latine *Cerofolium*, in Dutche *Kerbel*, in Italian *Gingidia*, in Frenche *Cerfical*, desireth a good ground, moist, and well dounge: it is sowed with the rest in colde places. In this same moneth they also sowe Beetes, though you maye sowe them when you wyll at any other tyme of the yeere as Spinage, it is a common Countrey hearbe, they call it in Greeke *τεύχον*, in Italian *Biorola*, in Spanishe *Acolga*, in Dutche *Beete*, or *Alengelt*. No Garden hearbe hath greater leaues, so that with due orderynge, it groweth like a young tree. It is called *Beta*, because when it seedeth, it is (as *Columella* affirmeth) to the likenesse of the Greeke letter *β*. There bee twoo sortes of them, the white and the blacke, the orderynge of them is after ou sort: it is sowed as Colwortes, Sorrell, and Radishe are, in Marche, Aprill, or Maye. Some thinke the best time for sowing it, is whyle the Pomogranate dooth flowre, it may be sowed neuer thelesse as Lettuse, Cols, and diuers others, at any tyme of the Sommer.

The

The seebe, the older it is, the better it is to be sown, as are the seedes of Smalage, Parsley, Garden Cresses, Sauerie, wild Marierum, and Coriander, though in all other the newest bee best. It commeth vp in Sommer the sixth daye, in Winter the tenth after the sowing, it loueth a moist, a ritche, and a mellow ground, you may remoue it when it hath put forth fine leaues, if your ground lyke well to be watred: if it be drye grounde, it must be set in the ende of the Sommer, as I haue sayde of Colwoortes, though it make no greate matter at what other tyme you doo it. When you remooue it, you must rubbe ouer the roote with newe doving. This is proper to the Beete, that his seebe come not all vp togeather, but some the peere after, some the thirde peere: and therefore of a great deale of seebe, there is at the first but a little shewe, it groweth the broader and the whyter, if when it is somethyng growen, you lay vppon it Tyle stones, or suche like, to cause it to spreade, as I spake before of Lettuse. Garden Cresses in Greeke κάρδαμος, in Italian Nasturtio, and Agrotio, in Spanishe Mastuerza, in Frenche Cresson, de garden, in Dutch Kerfs, are sowed both in the spring, and at the fall of the leaf, it commeth vp the first daye after it is sown, and drinketh away the moisture from suche hearbes as growe neare hym, mingled with other hearbes, he carcth not what weather come, and therefore prospereth both as well in winter as in sommer: if it be sowed with Lettuse, it commeth vp exceedingly, it delighteth in moisture, which if it want, it will dooe well yenough: in watric places in groweth of his owne accord, as about Padelbor, a Towne in Westphalia, it groweth in great abundance in the Riuer, and therefore is called of some Water Cresses: it was called in the olde tyme Sisimbrium. The branches when they were olde, are netted togeather with white hearp rings. Garden Poppy, called in Greeke μινον ημερος, in Latine Papaner satinum, is thought best to growe, where old stalkes haue ben burnt, it is sowed in warme places with other pottle hearbes. Mustardseede in Greeke σινάπις, in Latine Sinapi, in Dutch Seneff, in Italian Senape, in Spanishe Mostaza, in Frenche Senene, there are two kindes, white and blacke, it is best to be sown in the ende of sommer, and againe in March.

Garden
Cresses.

Garden
Poppy.

Mustard-
seede.

W. is,

Where

The second Booke entreatynge

Where it is once sowed, it is harde to ridde the grounde of it againe, because the seede dooth still growe as it falleth. It loveth to growe vpon droughhills, and cast bankes.

THRA. I see you haue very faire Radishes here.

Radishe.

MARIVS. Nothing so faire as I haue had them, for where as they delight in the Sunne, and in warme grounde, my Gardners haue here set them in the shadowe. The order of them is to be set in verie good grounde, and lying vpon the Sunne: some sayth, it dooth not greatly care for dowing, so it may haue Chaffe strawed vpon it. When it is come to some growth, they must be covered with earth, for if it flourish once aboue the ground, the rootes will neuer be good, but hard and full of piche. It is called Radishe, because it exceedeth all other rootes in greatnesse. *Plinie* writeth, that he sawe at *Erford* in *Germanie*, Radishe as bigge as the bodie of an Infant. It is sowed twyse in the yeere, in *Februarie* or *Marche*, the Moone being in the wane, lest it growe too much in leaues, foure fingers distant one from the other, and againe in *August*, whiche is the best season for them. Those that you set after the tenth of *June*, will neuer seede, the like is to be obserued in all other seedes, it cometh by commonly the thirde daye after it is sowed: in hot and Southerlie Countreys, the weather beeing fayre, it groweth soone to stalke, and quicklie seedes. The leaues as they grow, muste still bee trampled downe and troden vpon, whereby the roote shall growe the greater, otherwise it flourisheth with leaues, and giueth encrease to the leafe, and not to the roote: the lesse and the smooother the leafe is, the milder and the sweeter is the roote: colde as some say, dooth further the goodnesse of them. They say they will bee verie pleasant, if the seede be steeped in *Heedich*, or in the iuyce of *Reynolds*: they were sweete with colde as the Rape dooth, and their bitternesse is taken away with wine, and therefore some woulde haue Radishes watered and nourished with salt waters: beeing sodden, they come to be very sweete, and serue the turne of Rapes, geuyng fastynge, they prouoke vomite, they are hurtfull to the *Vines* and to the *Teethe*. Radishe eaten at first, is a good preservative against popson: eaten before meate, it breaketh winde, and prouoketh

mouoketh byrne: and after meate, it looseth the belly, it is called in Greeke *ῥαφαν*, in Latine *Raphanus*, in Italian *Raphano*, in Spanishe *Rauano*, in French *Rane*, in Dutche *Retich*.

THRA. There is an other kinde of them, that the Dutche men call *Merrettich*, I take it to be that whiche the Romanes called *Armaracia*, called commonly in Italy *Ramaracia*, the first letter misplaced.

MARIVS. You say well, but this is more full of branches, greater in leaues, thinnie in body: the leaues are not vnlike to the former Radishe, but that they are a little sharper and longer, and the roote slenderer, and therefore there are some that deny it to be *Armaracia*: but here let the Philosophers contend. *Theophrastus* maketh mention of sundry sortes of Radish. This kinde of Radishe hath a woonderfull bytting taste, a great deale more then Mustard seede, and fetcheth teares from the eyes of them that eate it: it is set and planted in this sort. The roote is cut in a greate number of peeces, whereof euery peece prospereth: for if you plucke vp this kinde of Radishe by the rootes, you may cut of a good quantitie of the roote, and diuiding them into small peeces set them, setting the old roote againe by hym selfe, and they will all growe and prosper very well.

THRA. Pea, haue you gotten the Rape: hitherto I thought hee had onely belonged vnto vs, for wee vse to sowe them after the Summe hath been at the highest, and immediately after, ouer other Corne, for the sustenance both of man and beast.

MARIVS. You doo well, and we sowe it nowe in Maye, and in watry ground sooner, and in some places in Iuly. There are diuers sortes of them, some of them rounde, some growe all in length, and are most pleasant in tast, as at *Binge*, and in the Countrey of *Banar*. Some agayne of the quantitie of a mans head, and of a hundred pounce weyght: but the smallest sort is the sweetest. There is an other kinde of Rape that they vse to sowe, whiche carieth his seede in little coddies, and is cheefely planted in Germanie for to make Oyle of, the whiche you the other daye spake of, it is called in Greeke *Golonles*, in French *Rane*, in Italian *Rapo*, in Spanishe *Nabo*, in Dutche *Ruben*.

H.iiij.

There

Rapes of *St. m*
waight in *Bar-*
uaria.

Rape oyle:

The second Booke entreatynge

The little
Rape.

There is also an other wyld kind called *Rapunculus*, that groweth halfe a yerde hie full of seede, and tender topped. This they geather in the spring tyme, before the stalke be sprung vp, and pulling it vp by the rootes, doo vse it in Sallettes, supposyng it to bee a wyld kynde of Rape. The Nauens also called in Greeke *γομόλιν*, in Latine *Napus*, in Frenche *Nauet*, in Italian *Napo*, in Spanishe *Nabicas*, in Dutche *Stockeruben*, may be counted in the number of Rapes, for Rapes in some grounde change into Nauens, and in some ground, Nauens into Rapes. These also loue to growe in a well watred, mellowe, and a ritche ground: though suche as growe in Sandie and harraine ground, prooue often the sweetest in eatyng. They vse to sowe them in Marche, and in some places before, as also in August. Parsneppe in Greeke *παρσινάκος*, in Latine *Pastinaca*, in other tongues almost as in Latine, is verie pleasant to be eaten, and requireth a fat and ritche grounde, and deepe digged, whereby the roote may haue roome penough to growe in: it is sowed and set in the spring, and in the ende of sommer.

Nauens.

Parsnep.

Redde and
yellowe
Carrettes.

THE A. You haue here also in this Garden red Carrets, **MARIVS.** I haue so. Yellowe Carrettes is called in Greeke *σιαρον*, in Latine *Sifer*, in Frenche *Cherville*, in Italian *Sifero*, in Spanishe *Chirinias*, in Dutche *Querlin*, I thinke you knowe it. *Plinie* wyrteth, that *Tiberius* was so in loue with this roote, that he caused Carrettes to be peerey brought hynr out of Germanie, from the Castle of *Gelduba* standing vpon the Rhine. It delighteth in colde places, and is sowed before the kalendes of Marche, and of some in September: but the thirde and the best kinde of sowing as some thinke, is in August. There is also wyld Carret, a kinde of Parsnep, in Greeke *δανος*, in Latine *Daucus*, in Italian *Danco*, in Frenche *Carote sauvage*, in Dutche *Woortzel*, there are that suppose it to be the yellowe roote, that is so common in Germanie, they are to be sowed in March. It is general to Rapes, Radishes, Parsnepes, Carrets, Onyons, and Leekes, that they be well troden vpon, or kept cutte, to the ende the rootes may graiue the greater. Of Leekes there are twoo sortes, the one called *Capitatum*, *περιστον*, and the other *Sectinum*, whiche they vse alwayes to cutte close by the ground.

Nota

Leekes.

ground. The heade, or sette Leeke, in Greeke κεφαλωτον, in Latine *Capitatum*, in Italian *Porro capitato*, in Spanishe *Puerro con Cabeza*, in Dutch *Lauch*, in French *Porreau*, the other Leeke in Latine *Sectile*, in Greeke τριςόν, in Dutche *Schmitlauch*, beside the often raking and dounying, must be watred as oft as you cut it doune. The seedes in colde hotte Countreys, is sowed in Ianuarie or Februarie, and in colder places, in Marche, to cause it to growe the fayrer and the better. They vse to knitte vp a good deale of seede togeather in thyme Lymen clothes, and so to laye them in the ground: but to make them greater headed, when it hath well taken roote, they vse to plucke it vp by the blades, and rayse it so, that as it were hangyng and borne vp by the earth, it is forced to fill the emptie place that lyes vnder it: the blades and the rootes cut of, they vse to set the heades, vnderlayng them with a Tyleharde, that when as they are not able to runne doune in length, they shoulde be driuen to growe in bignesse and breadth. The Leeke delighteth in good ground, and hateth watry ground: sowed in the spring, it muste be remooued or set agayne after Haruest, that they may bee the greater, the earth must bee continually loosed about it, and they must bee pulted and rayled vp, as I sayde before: if when you remooue them, you make in the heades of euerie one a little hole with a peece of a Reede, or any thynge except Iron, and thrust therein a Cucumber seede, they will growe to a woonderfull greatnesse: some vse in steade of Cucumber seede, to put in Rape seede. To haue very large and great Leekes, you must hollowe a Creatle of Goates dounge, and fyll it full of Leeke seede, for the little sproute at the fyrst restrayned, will runne altogether in one, and so come forth of the ground: and thys as Hieronimus Cardanus wyrteth, hath been often tryed to bee true. They shall not sauour of Leekes or Onyons, that haue eaten Cummin after. It commeth vp the tenth daye after the sowynge, and lasteth twoo yeere: the first yere in contenteth it selfe onely with bearyng of leaues, the next yere it riseth in a long stafke hollowe within, the toppes garnished with rounde knoppes of flowres. The Onyon, in Greeke κερδμυον, in Latine *Cepa*, or *Cepe*, in Italian *Cipella*, in Spanishe *Cebolla*, in

goates dounge

to take away the
sauer of likes
onions by eating
romney herbs after
them

Onyons.

The second Booke entreatyng

Frenche Oignon, the next neighbour to the Lecke, is also of two
 kindes, the one kind called *Capitatum*, that groweth to head, the
 other *Fissile*, that without any head onely flowrisseth in blades,
 and is often geathered as Leckes are, & therefore onely is sowed
 and not set in Februarie or March in sayre weather, and in the
 wane of the Moone: it delighteth in ritche ground, well digged &
 doungeed, and therefore *Columella* would haue the grounde well
 fallowed, that it may be mellowed with the Winter frostes, and
 after doungeed, after well digged againe, and the rootes and
 weedes cast out, layde out in beddes and sowed: it is called *Fis-*
file, because it is parted and diuided belowe, for in the Winter
 it is least with his toppe naked: in the spring tyme the blades
 are pulled of, and other come vp in their places. The heades are
 set, and if you plucke away the rayles and the outgrowynges
 when you set them, they will growe to be verie greate. Twentie
 dayes before you set them, digge the grounde well, and laye it
 drye, and so shall they prosper the better. The heades are set in
Autume, and growe to seede as other plantes doo: if you meane
 to geather the seedes, when the stalke is growen, you must prop
 it vp with little stickes, that the windes shakynge of the stalke,
 shatter not the seedes, nor breake the stalke: whiche seede you
 must geather before it bee all blacke, for the blacknesse is a true
 signe of the full ripenesse: if you will not haue it seede but head,
plucke of the blade still close by the ground, so shall all the main-
tenaunce goe to the roote. Among all other hearbes, onely the
 Onyon is not subiect to the force of the Moone, but hath a con-
 trarie power, for it wareth in the wane of the Moone, and de-
 creaseth in the encrease of it: yet there are that holde opinion,
 that if you sowe them in the wane, they will be the smaller, and
 sourer, and in the encrease, they will be the greater, & the milder.
 The redde Onyon is more sharpe then the white, they are beste
 preserued in Barley Chaffe, if first you dippe them in hotte wa-
 ter, and after drye them in the sunne, tyll they bee through drye.
 They are of the common people thought to laste longest breyng
 hanged vp in the smoke, for the kpyred it hath with the Onyon.
 I proceede to speake next of Garlick, called in Greeke
ονδοσος, in Latine *Allium*, in Italian *Aglio*, in Spanishe
 Aio,

Fissile.

Onyons.

Garlick.

Allium

Aio, in Dutche *Knobloich*, in Frenche *Aux*, it groweth with a blade like the *Dnyon*, but not hollowe, the stalke rounde, and the flowres in the toppe in a rounde tiste where the seede lyeth. *Garlicke* groweth both of the head and the seede, as the *Dnyon* and other of this kinde dooth. It is commonly sowed in *Febu- arie* or *Marche*, according to the disposition of the weather, as the *Dnyon* is. It would be sette in the vppermost parte of little narrowe *Ridges*, the *Cloues* beyng distant foure or fyne inches one from the other, and not verie deepe. After, when the *Cloues* haue put forth the little stringes, or when their *Blades* are come vp, they must be well racked, for the oftner ye doo so, the greater they wyl be: but if you will haue the heades the greater, before it growe to stalke, you shall wynde and wreath the greene blades togeather, and treade them to the ground, for that continuall treading vpon them will make them the greater. In *October* the *Cloues* must be plucked a sunder, & set in rowe vpon hie borders, that they may scape the daunger of the winter stormes. They say the seant of them will sease, if you eate after them the roote of *Beetes* toasted at the fyre: thus sayth *Plinie* out of *Menander*.

to take away the
saue of garlike
by eating of beete
toasted against & fro

THRA. What hearbe is that yonder that commeth vp so hie as a man may make a staffe of the stalke, the leaues large and rounde, the flowre in shape seemyng to compare with the *Rose*?

MARIVS. It is *Hollioke*, or garden *Mallowe*, in Greeke *Μαλαχ*, in Latine *Malua hortensis*, in Dutche *Peppell*, in Italian and Frenche, almost as in Latine.

Mallowes.

THRA. What, the same that *Horace* taketh to be so wholesome for the body: and whiche of *Hesiodus* and *Martial* is so highly commended?

MARIVS. The very same, and also whiche is more wonderful, in it the leaues turne about with the sunne, so that it may serue in steade of a *Dyall*, declaring by the turning of his leaues, what tyme of the daye it is, though the Sunne doo not shine, whiche the *Philosophers* thinke to be doone, by the drawing of his moysture. In *Africa* as *Plinie* writeth, it commeth in seuen monethes to bee like a young *Tree*, and serue well for a walking

horologium
mirabile:

The second Booke entreating

walkyng staffe. It is sowed in October, or in the ende of the sommer, as also at other tymes, that by the commyng on of Winter, it may be restrained of his high growth: it reioyceth in rich and moyst grounde, and must bee remooued when it cometh to haue foure or five leaues, it groweth best when it is young: when it comes to be greater, it dyes in the remoouing. We vse it both for the pottle and for salletes, the taste is better when it is not remooued: you must sowe it but thynne for growyng to rancke, and in the middest of them you must laye little cloddes or stones, it requireth continuall rakyng, and maketh better the grounde where it growes.

THRA. I marueyle whether you sowe Purcelayne, sith it groweth wilde abroad.

Purcelaine.

MARIVS. The Greekes call ἀνὰ ποταμῶν, the Latines *Portulacan*, with the Italians it hath the same name, in Spanishe *Verdolaga*, in Frenche and Dutche *Porchelle*, it is sowed in Gardens, and well ordyed dooth growe the better and spreadeth the farther, it hath a blacke seede growing in little greene cuppes.

THRA. Buglose that the Greekes call ἐρύλασσον, the Latines *Bugglossum*, the Dutchmen *Ochsenzang* or *Burretsh*, the Frenchmen *Boragne*, the Italians *Borache*, the Spaniards *Borac*, Is not this it that I see here with the faire blewe flowre, and a stalke a foote long, and full of branches?

MARIVS. Buglose is at this day with the Potecaries called *Borage*, though they differ somethyng in the flowre, and in verie deepe they are twoo sundrie hearbes, for some call the common *Borage*, the lesser *Buglose*, and the greater *Buglose*, is thought to bee that whiche *Dioscorides* calleth *Circium*, the true *Buglose*, the flowres of both sortes are vsed in *Salletes*, and in wine, because it maketh the heart mery, and therefore is called in Greeke *κρυπτομυρία*, that is to saye, gladuette, the leaues are also vsed in dresyng of meates, it is sowed about Marche, and once sowed, it will neuer away, there is also a wild kinde of it.

THRA. I pray you goe forwarde, and tell vs some thyng of *Straberries*, whiche here grow with great plentie and beautie,

Buglose or
Borage.

tie helped as it seemeth with good ordering.

MARIVS. They are so, for we vse to bying rootes out of the wooddes, whiche being sette and planted in the Garden, prosper exceedinglie twoo or three yerres together: and after, wee either remouue them againe, because they waxe wilde, or set the wylde in theyr places: and so haue wee them to peeelde theyr fruite twise in a yere, in the Spring, and in the ende of sommer. And although it groweth of it selfe in shadowy woods in greate plentie, as if it delighted in shadowe of Trees, yet beyng brought into the Garden, it delighteth in somue places, and good orderpng, peelding a greate deale more and better fruite: it creepeth vpon the ground without a stalke, with small stringes commynng from the roote, with a white flowre, and a leafe lyke a Trefoyle, indented about. The berries, whiche is the fruite, are redde, and taste very pleasantly, the Dutchmen call them *Erdbern*, the Frenchemen *Freses*. There is an other fruite that groweth something higher, whose Berrie is also like the *Straberie*. *Dioscorides* seemeth to call it *Rubus Idæus*, the Byper of *Ida*, because it groweth in great abundance vpon the mountayne *Ida*. It is not full of prickles, as the other brambles are, but soft and tender, fild of branches and whitish leaues, it beareth redde berries, something paler then the *Straberie*, and very pleasaunt in taste. The Grecians call it *ῥάβδος ἰδαίου* and *κόμαρον*, the Dutchmen *Imberen*, the Frenchinen *Framboesas*.

Straberries. by the removing of them to beare fruite in one yere.

Rasprs.

THRA. What is that groweth yonder, a yarde in height?

MARIVS. It is commonly called *Liquerise*, in Greeke *γλυκύριζα*, in Latine *Dulcis Radix*, in Italian *Regolitia*, in Spanishe *Regaliza*, in Frenche *Reclisse*, in Dutche *Clarits*, or *Sussholts*.

Liquerise.

Dulcis radix

THRA. I did not thinke to haue founde it here. I heare it groweth very plentifully about the Heyne, I woulde be glad to heare howe you doo order it, for it hath a roote for the sweetnesse thereof (whence it taketh his name) very commendable.

MARIVS. It is set of young springes of the roote: as the Hoppe is, in drye light ground, and soupy.

Small Reazins.

THRA. What say you to small Reazyns, called in Latine

Ribes,

The second Booke entreatyng

Ribes? doe you thinke the olde writers knewe this bushe?

MARIVS. That whiche we call at this day *Ribis*, and the Dutchmen *Saint Johns pearle*, because about Midsummer it is garnished with redde and ritch berries, hauing a tarte taste, quenchyng thirst, cheefely, the ragyng and extream thirst of feuers, and coolyng the stomacke, whiche the Apothecaries in Suger or Honie keepe all the yere, is thought was unknowen to the olde wyters: but now a common bushe vfed for encloasyng of Gardens, and makyng of Borders and Herbes: it will easely growe, but that it is something troublesome, by reason of his sharpe prickles to be bent aboute sommer houses.

Hoppes.

Reade the
perfect orde-
ring hereof
in master
Reynolde
Scots booke
of Hoppe
Gardens.

THRA. You spake euen now of Hoppes, doe you set in these poure princely Paradises, that plant that is so common with the Countrey man: for about vs they make greate gayne of it.

MARIVS. Tell you therefore, I praye you, howe they dooe vse it.

THRA. It is set of the young shootes, as you tolde a little before of *Liquerise*, and that in the ende of Sommer: or if they feare a harde winter, in Marche. The settes or shootes are cutte from the olde rootes, and are set in grounde well couered with dounge and good mould, and afterwarde hilled, and so suffered to remaine all Winter. In the Spring, the earth is stirred with Rakes, and not with Spades, and the hilles rapsed, and the ground ridde of all hurtfull weedes. About May, certayne poles are set vp, vpon whiche the Hoppe clymeth: all the spraye that springeth aboue the flowre, is commonly cutte of. About September, or in the ende of August, the flowres or bels are geathered and kept to make Beere with: when the Hoppes are geathered, the remaines are cut downe close to the grounde, and the hilles beyng againe raised, are couered with dounge. The toppes, and the young buddes that come first out in Aprill, are vled to be geathered for salletes, and keepeth them from growyng to ranke. But now, I pray you goe on, and retorne to the description of your Garden. What excellent Bellons, Pompens, Courcumbes, and Gourdes haue you here, I pray you tell in what sort you order them.

MARIVS.

MARIVS. Melons (whiche some, because they are fashioned like Apples call *Hommes*) are of like kinde of Coucumbers, and so are the *Depones* which the Frenchemen call *Pompeons*. The Coucumbers in Greeke *αινυς ημερος*, in Latine *Cucumer*, in Italian *Cucumero* or *Cedrulo*, in French & Dutch *Cocumbre*. They change to *Pompeons*, and *Buckemillions*, from whiche they onely differ in shape and greatnes; when they exceede in greatnesse, they become *Pompeons*, and when they growe rounde, they are *Hellompompeons*: all these kindes are called of some wyters *Melons*. The Grecians call all the sortes, as well Coucumbers as *Hellompompeons*, by the name of *Pompeons* and *Melons*: though there are some that make a difference betweene *Pompeons* and *Melons*, neither doo the learned yet thoroughly agree vppon these meanes, nor can it bee certaynely saide what kinde the olde wyters ment by *Pompeons*, and *Hellompompeons*. *Pompeons* doe creepe a long vppon the ground with russe leaues and yeloww flowre, and are pleasant to be beaten when they be ripe. The sweetest sorte of them they call *Succrino*, or *Buckmillions*. The *Hellompompeons* are supposed to spring first in *Campania*, being fashioned like a Quince. This kinde hangeth not, but groweth rounde lying vppon the ground, and being ripe, doe leaue the stalk. Some Coucumbers are called *Citrini*, of their yelowwnesse when they be ripe, and also *Citruli* or *Citreoli*, they growe all in length, and are spotted as the Citrons are: some be called *Marrin*, and be called in Italian *Cucussa Marina*, the seede whereof is to be eaten before they be ripe: they are cut in peeces, and porredge made of them, not muche unlike in fashion to the *Melon*. There is also an other kinde of Coucumber of a houghe compass, almost as bigge as a bushell: the *Dowers* and *Haruest* folkes in *Italie*, vse to carrie greate peeces of them to the *feelde* with them, to quenche their thyrst. You must set all these kindes in March, the seedes must be set thynne, twoo foote one from an other, in watrye ground well dounge and digged, specially sandy ground: you must lay them in Dilke, or Clater and hony three dayes: and after dreye them and saue them, so shall you haue them very pleasant. They will haue a very
Sweete

Coucumbers.

Buck millions

The second Booke entreating

Sweete sauer, if their seedes be kept many dayes among Rose
 leaues. Your Cucumbers shalbe long and tender, if you set vn-
 der them water in a brode vessel, two handfulls vnder them.
 They delight in water so much, as if they be cut of, they will yet
 bend towarde it, and if they hang or haue any stape, they will
 grow crooked, as also if you set oyle by them, whiche they great-
 ly abhorre. The flowres being suffered to growe in Pipes, doo
 growe to a wonderfull length. They loue not the Winter no
 more then both the Gourde, whereunto they are almost like in
 nature, for the flowres, the leaues, and the claspers, are like of
 them both: but the Gourde is more busie in climbing, so that
 with hastie growth, it spreadeth quickly ouer the Verbes and
 sommer houses, running by by the walles, and mountyng vp
 to the very Eyles of the houses, hauing a great fruite of a mon-
 strous bignesse, hangyng by a small stalk, in fashion like a
 Peare, and greene in colour, although when it hath flowered, it
 will growe in what fashion you will haue it: they say, there
 hath been some of them nine foote in length. The rounde ones
 also growe to be vled for great vessels: the rynde of the newe
 ones, is soft and tender, but of the olde ones hard, whereof when
 the meate is out, traualers make great bottles to carrie drinke
 in. The Gourdes that are vled to bee eaten in sommer, are sun-
 dry in shape, for some are rounde, some long, some broade: and
 though the fashion be diuers, yet the nature is all one: for it is
 made by arte to growe in what shape you will, as in the forme
 of a creeping Dragon, or what you list, they are called in Greeke
 καλόνυδα, in Italian Zuma, in Spanishe Calibaz, in Dutch
 Knirbisch, the French *Vne courge*. The seedes that the Gourde
 beareth next to the stalk (as *Paladius* sayth) are longest, they in
 the midst rounde, and those that lye ou the side, short, broade,
 and flatte: if you set the sharpe ende of the seede downewarde,
 as *Columiella* sayth, you shall haue them both greater Gourdes
 and Cucumbers. It delighteth in a moist, rich, wel doungev,
 and well watered ground. That which groweth without water,
 bringes the pleasanter fruite, and that whiche hath water ye-
 nough, needes the lesse looking to. The flowres where they bee
 set, must bee digged a foote and a halfe deepe, the thirde parte
 whereof

Gourdes. &
 9 foote longe
 vt fertur.

whereof must bee filled with strowe, and then with good ritche mould: it must be filled to the middelt, then the seedes beyng set, must be watred tyll they be sprong, and after, earth layd to them still as they growe, till the Furrowe be filled. They must be set thimne, two foote a sinder, it commeth by in sixe or seuen dayes after the setting. Those that are sette in dype grounde, must bee berie well watred, therefore they vse to set by them earthen potes full of water, with ragges or cloutes in them to water them. When they bee a little growen, they must haue helpes set by them to climbe vppon, the longer they bee, the better the meate is. You must beware there come no woman neare where you set them, for their presence dooth greatly hurt them. Those that you keepe for seede, you must suffer to remaine vppon the stalke tyll Winter, and then gathering them, and dype them, eyther in the lime, or in the smoke, for otherwise the seede will rotte and perishe. They will long bee preserued and continue freshe, if after they bee gathered they bee put into a close vessell with the Lees of white wine, or hanged in a vessell of vinegar, so that they touche not the vinegar.

signe of women
greatly hurteth
the seede.

T. H. R. A. What meaneth that great Thistell that springeth there?

M. A. R. I. S. Did you neuer reade in your *Columnella* of the Hartichoch, specially in his verses that he wrote of Gardnyng, where he sayth.

Artichoch.

*Goa set the brysted Hartichoch;
That well with wine agrees. &c.*

Athenens in his second booke *Dipnosophus* out of *Sophoclus*,

Κυρεος αραειλα παρτα πλανη ελαϊαν.

A Thistell is the Hartichoch, that euery where doeth growe. It is a kinde of Thistell, by the diligence of the Gardener, brought to be a good Garden hearbe, and in greate estimation at noble mens tables: it is as you see framed with a round pickly head, hauing a greate sorte of flakes set in order steple wise. The Greekes call it *κυρεος* and *αραειλα*, the Latines *Struthium*, because the fruite of it something resembleth the pineapple. The Frenchemen call it *Altiocalum*, of the Arabick article *Al*, and *Cosalos* a Pineapple, whereof it is corruptly called *Artichaut*,

The second Booke entreatynge

in Italian and Spanishe *Cardo*, in Dutche, sometyne by the French name, sometime *Serobirn*. It is called of *Columella Cinnara*, because in his growynge, he cheefely delighteth in ashes. The seede is best sowne in March, and the sette in November: if you will haue it yelde fruite in the Spring, you must bestowe muche ashes vpon it, it will hardly beare the first yeere that it is sowne. Beware that you sette not the seede with the rong end vppward, for so shall your Artichoch prooue verie little and euill fauoured. It loueth good grounde and well dounge, and prospereth best in fatte ground. *Palladius* would haue you moreouer, to sette the seedes in well ordered beddes, in the increase of the Moone, halfe a foote a sunder, and not deepe, but taking them in thre of your fingers, thrust them downe, till the earth come to the first ioyntes of your fingers, then couer them tenderly, and water them often, specially toward Sommer, so shall you haue the bigger fruite. When they growe vp, they must be continually weeded and dounge, as I saide with ashes. They say, they will loose their prickles, if the toppes of the seede be made blunt vppon a stone before they be set: and sweeter they will be, if the seede be laide in Milke. You must keepe them from Howles and Hyle, with Cattes or tame Weelsels, as *Ruellius* teacheth you. *Athenens* calleth the stalk of the Artichoch, *κακτόν*, that lyeth vpon the ground, and that whiche standeth vpright *τερενικόν*.

THRA. Well, what hearbe is powder saffre that commeth vp as it were heares, with a hile with the flowre and pale, hauing in the midst of the belles, as it were, fierie yellowe tongues?

Saffron.

MARIVS. It is Saffron, in Greeke *αζόνιον*, in Latine *Crocus*, in Italian and French so, in Spanishe *Azafran*.

THRA. What neede we care any more for either *Coricum*, *Sicil*, or *Cyren*, from whence we fetch it with so great charges?

MARIVS. Pea, there groweth great plentie of it in Germanie about *Spira*, and diuers other places, whiche maye compare in goodnesse with any other place. It is set in March of the head that it hath rounde, and in cloutes as the *Lylie*, the *Lecke*, and the *Sea Dymon*. *Constantine* affirmeth, that it may be sette of the roote, as soone as the flower is of. The rootes of
the

Nota

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the heades doo so encrease vnder the ground, that of one of them
some yeere springeth eight or niene others. In many places
they are remooued euery seventh or eight yeere into better
ground, whereby they come againe to be as good, as at the first.
In the Countreys lying vpon the Rhine, they plucke them vp
euery thirde yeere, and laye them a drying in the sunne till Au-
gust, and then pulling of the outer skinne, they set them agayne
halfe a foote one from the other: the best heades are those that
are fattest, and haue little heares, the woodst looke rottenly and
illfaoueredly, and haue an ill sauour: It delighteth to growe by
hie wayes and neare springes, and to bee trodde and trampled
on, prospering as it were by oppression: it groweth greene all
the Winter, it is geathered in Autumne, when it is come to his
colour, by plucking out the little yelowie tongues from the bell,
whiche are after wardes dyed thier or foure dayes together,
and well picked and pouaged, and so made vp in Botes: some
thinke it best to dye it in the shadowe. It is craftely counterfei-
ted by the Apothecaries, braying it in sodde Wine, whiche they
besmeare adding therto the skumme of silver or lead to encrease
the weyght, the craft is perceiued by the businesse thereof, and
by the sauour of the sodde Wine. The proufe of the good is, if it
crackle betwene the handes as a brittle thing, whiche the coun-
terfeite dooth not, or if in putting it to your mouth, it cause your
eyes to water. Therefore, the best is that whiche is newe, and
hath a pleasant smell, in colour like to Golde, and dyeth the fin-
gers in touchyng it. In Marche you must pouage the grounde
where it groweth, and whether ye plucke it vp or not, notwithstanding,
other hearbes may verie well growe there vntill Au-
gust: Purslepne, Parsley, or suche like hearbes doo best growe
there. And when the Saffron beginneth to flowre, you muste
ridde away the other hearbes: for in Haruest tinte about Sep-
tember or October it flowreth.

Saffron

T H R A. Here is great store of Rosemarie, the cheefest
beautie of Gardens, and not to be wanted in the Kitchen.

Rosemary.

M A R I V S. Of the orderyng of Rosemarie, sith you will
haue me, I will speake a litle. There are whiche suppose it to
be the same whiche the Grekes call *λεβάνη*, because it sauou-

I. i.

reth

The second Booke entreating

reth like Frankencense, in Latine it is called *Rosmarinus*, and
 in all other tongues in keepeth the name, it serueth both for plea-
 sure and profite. *Theophrastus* maketh two kindes of it, a bar-
 rayne, and a fruitefull, and is set of small slippes in Aprill: it is
 sette by women for their pleasure, to growe in sondry propor-
 tions, as in the fashion of a Cart, a Pterock, or such like thing as
 they fancie. It delighteth in stonie or rough ground, and in the
 toppes is the seede inclosed in little huskes white and round. It
 flowreth twise a yeere, in the spring, and in the ende of sommer:
 it is geathered from May till September, and it is good to
 plucke of the flowre often, that it maye not flowre too muche.
 In the higher partes of Fraunce it groweth wilde in such plenti-
 tie, that they vse almoste no other seuell: it is in colde Coun-
 treis in Winter set in Sellers and hotte houses, and is brought
 agayne in the Spring into the Garden. But here you must be-
 ware, that when you sette bying it out, you keepe it from the
 Harche sunne, setting it in the shadowe, acquaintyng it by little
 and litle with the ayre: some vse to house it with Strawe and
 Horse doung, and so leaue it in the Garden. Sauge, in Greeke
ελελαιοφανος, in Latine *Salvia*, and like in other languages, is
 an hearbe common in euerie Garden: it is planted both of the
 seede and the slippe in March, in any kinde of ground, it maketh
 no matter where: the Gardners vse to lay buckyng ashes about
 it, whereby it prospereth the better. Next to Sauge is Hynt, in
 Greeke *ἀνθοςμος*, in Latine *Menta*, in Dutch *Mynz*, in It-
 talian and Freuche, after the Latine, in Spanishe *Terna buena*:
 it is planted and ordered in all thing as Sauge is, it prospereth
 both in drye, and wette groundes, and groweth well by waters.
 If you lack seedes, you may take the seede of the wyld Hynte,
 and set them with the toppes downe warde, whereby they shall
 leaue their ranknesse, and beying once sowne or sette, groweth
 euery yeere. Pimpernell, in Greeke, *πεδύλιον*, in Latine *Pimpi-
 nella*, is vsed both in the Kitchen, and in Physicke, and beying
 once sowne, groweth euery yeere both in sonnie places, and in
 shadowy: it groweth in most places wyld, Hyssope, in Greeke
ύσσωπος, in Latine *Hyssopus*, and so called in most tongues in
 Europe, a common hearbe knowne to euery Gardner: it desir-
 eth:

Rosmarinus

Sauge.

Mintes.

Pimpernel.

Hyssope.

reth, though no sonny ground, yet good and ritche ground, it is planted both of the seede and of the slippe: when it hath once taken roote, it careth not for the sharpnesse of Winter. Sauerie in Greeke *δουβρα*, in Latine *Satureia*, or as *Columella* sayth, *Cunila*, in Italian *Coniella*, *Sanoreggia*, *Thymbre*, in Frenche *Sauoreje*, in Dutche *Kunel zwibel hisop*, groweth in barrayne places, and is set and sowed as the plantes before. The next is that whiche commonly is called *Basyl*, in Greeke *ωκυμων*, in Latine *Ocymum*, in Frenche, Italian, and Dutch, *Basilica*: an hearbe that is vled to bee set in the midst of knottes, and in windowes, for the excellent sauour that it hath: it is also good for the pottes, it is sowed in Marche and Aprill, and delighteth in sonny ground, you must put two seedes still together. *Basyl* is best watred at Noone, whereas all other hearbes are to bee watred in the moynyng and in the euening, it may be remooued in May. *Theophrastus* sayth, that it prospereth beste, when it is sowed with cuses. *Marierum*, in Latine *Amaracus*, and *Maiorana*, is also in like sorte vled, the Dutch and the Italians call it after the Latine, the Spaniards *Amoredux*, the Frenche *Mariolaene* and *Thyn*, in Greeke of *Dioscorides* and *Paulus Aeginet* *αμνριον*, this also for the pleasant sauour it hath, is set in pottes and in Gardens: in is sowed in Marche three or foure seedes together, and halfe a foote a sunder, in May when it groweth to some heyghe as *Basyl*, it is remoued. Time neare of kintred to these, in Greeke *δυμος*, in Frenche, Italian, and Dutche, like the Latine, in Spanishe *Fomillo*, delighteth in stonie, light, and sonny ground: it springeth both of the seede and of the slippe, and also of the floure as *Theophrastus* sayth. These three tender and delicate hearbes, are to bee sowed with greene heede, either in earthen pottes, or in Garden beddes. Hitherto haue I described vnto you, such hearbes as serue for the Kitchen, and because the latter sortes are also esteemed for the sauours, I will goe forward with the description of the rest that are set in Gardens for the pleasure of them, and for the sauour, doo garnishe the layde Gardens, and serue also for other purposes. Of *Rosemarie*, I spake before, I will now proceede with these that growe before my feete. *Laurenc*, col-

Sauorie.

Basyl.

Marierum.

Time.

The second Booke entreatynge

Lauender.

led in Latine *Lananda*, or *Lanendula*, that groweth in borders about the beddes, in Greeke *πενταδονδεον*, and kepeth the Latine name in other tongues, dooth growe in wilde places and stonie: it is set of the flippes, and remooued: it groweth to Spike in Iune, and in Iulie is geathered and tyed in bundels for the sauour, the flowre is distilled for sweete waters. Flowre gentle, in Latine *Amaranthus*, in Greeke *ελιχευσον*, though it haue no sauour at all, yet hath it a delightfull beautie to the eye, the Frenchemen for the fayrenesse of the colours, excellynge both crimson and purple in grayne, doo call it *Passenellers*, the Italians *Fioreluto*, because it contendeth in colour with crimson in grayne, it loueth to be often geathered and plucked, whereby it springeth the better, the flowres after they be dead, with a little water come againe to their colour: it is called *Amaranthus*, because it dyeth not.

Flowergentle

Lauender
cotten.

THRA. Here foloweth Lauender cotten.

MARIVS. This Lauendercotten, in Greeke is called as *Plinie* supposeth *χαμαινιπαισσον*, as it were the little Cypress, some call it *Santonie*, and female Sothernewood, in Dutch it is called *Cypressen*, in French *Cyprez*, it groweth commonly in Gardens, springing euery yeere. Myrtell, in Greeke *μυρτιν*, in Latine *Myrtus*, in Italian *Myrto*, in Spanishe *Araihan*, in French *Meurto*, in Dutch *Welscheheidelberr*, the leaues are not much unlike to the leaues of the Olive tree, something smaller, with slender Branches, and Leaues growing in order one by another as you see, with blacke berries, and leaued like the *Pomegranate*. It groweth alwaies greene, it is set and sowed both of the seede, the Slippe, and the stocke: but you must styll raise vp the the earth about it, till it be thoroughly rooted. Some sowe the berries being a little beaten, and couered in Furrowes of earth, it delighteth in continuall weeding, so groweth it to a handsome height, meete to shadowe hearbes: it loueth to be watered with the wyne of men, or of sheepe. This onely is to be wooindred at, that of the licour thereof alone, may be made all sortes of wine and Dyle. *Cato* teacheth to make wine of the berries, being dyed, and put in water and honny sodden together: if they be not dyed, they come to Dyle, howe the *Artine* of them

Myrtel.

Hot verte es
mirabile: /

is made, *Dioscorides* sufficiently declareth. *Plinie* reporteth, that *Cato* made three sortes of Hytels, white, blacke, and a thirde kinde that hee calleth coniugale: it delighteth to growe by the Sea bankes, as *Seruius* sayth, it groweth at this day commonly in *Italie*, along by the Sea coastes.

T H R A. Oh what sweete and goodly Gelyflowres are here: You may truly saye, that *Solomon* in all his princely pompe, was neuer able to attayne to this beautie: some of them glitter with a perfect crimison dye, some with a deepe purple, and some with a passyng beautifull Carnation: I marueyle the olde wryters knewe nothyng of these in their tyme

Gilyflowres

M A R I V S. There are some that suppose to be a kinde of Garden betony, whiche the Gardener fetching out of the seeld, and thrustyng Cloues into the rootes of them, with diligent plantyng haue brought to this excellencie: others thinke it to be called *Vetonica* of the Spaniardes, who fyrst founde it. Some thinke it to be *Oenanthe*, because it flowreth with the Vine: it delighteth in warme souer grounde, it is sowed seeldome of seede, but commonly sette of the flippes, as I sayde of *Rosemarie*. The Gardners in the ende of Sommer, doo take the rootes and set them in pannes, pottes, or payles, and when the frostes come, they carrie them into their Sellers, and in sayre warme dayes bying them abroade agayne, and suffer them to be nowe or then watred with the Rayne. It hath been often seene, that in suche wardtes or sellers, they haue flowred all the Winter long, through warmenesse of the place: some set bowes about them, and couer them with strawe and Horse doying, to preserue them against the colde: it often happeneth, that one Roote beareth one yere white flowre & redde, and the third speckled or Carnation.

T H R A. Loe, yonder are *Roses* growyng in Borders, and made in a maze: doo they growe of the seede, or of the sette:

M A R I V S. *Roses*, called in Greeke *ῥόζα*, in Latine *Rosa*, and in all other languages as in Latine, are diuersly planted, sometyne of the Rootes, sometyne of the Branches, being cutte in small settes, and planted a foote a sunder. Some wrethe them in Garlandes, and so sette them to haue them smell the pleasanter. The vse of sowyng of them is best: howe be it,

Roses.

I. iij.

they

The second Booke treating

Muskroses.

they will very well growe of the seede, though it bee long care they spring, and therefore they set them of settes a foote in length: at neyther delighteth in ritche or moyst ground, but is well contented to growe amongst rubbishie, and under walles. The places where they must growe, must be dygged deeper then Corne ground, and not so deepe as the Vineyard: the Rose is rather a thorne then a plant, and groweth vppon the very brambles: it cometh first out in a little budde and long sharp beard, whiche after they be opened, it discloseth it selfe and spreadeth abroad, with a yellowe heartie tuske in the midst. *Plinie* maketh mention of sundry sortes of them: one sorte hee calleth *Milesia*, hauing an opient and spheric colour, an other *Alabandica*, with white leaues, and *Spermonia*, the basest sort of all: the damaske and the white, are vled for sweete waters: they differ in roufnesse, prickles, colour, and smell. There are that haue but onely fyue leaues, and others with an hundred leaues, neyther good in beautie, nor in smell: the roufnesse of the rynde (as *Plinie* sayth) is a signe of the sauour. There are some little pale ones called *Carnation* & *Provincers*, these doe woonderfully growe where they once are planted, and haue a most excellent sauour. Roses are vled to be sette in Februarie, whiche is eyther doone with the seede, or the Sette planted in little Furrowes. The seedes (as *Paladius* sayth) are not the little yellowe thynges in the midst of the Rose, but the graynes that growe within the redden ripen Berrie: the ripenesse whereof is deemed by the swarthinesse and the softnesse of the berrie: where they once are planted, they continue long, and after they dye, they sende out newe Buddes and Springes. If you lacke Settes, and woulde of a fewe haue a greate number, take the branches that begin as it were to shewe their buddes, and cuttyng them in sundry setts, foure or fyue fyngers in length, set them in good grounde well douned and watred: and when they bee of a peeres groweth, take them by, and set them a foote a sunder, proyne them and trimme them with often digging about them. Roses must styll be cutte, for the more you cutte them, the thicker and the doubler they growe, otherwise they will waie single and wilde, it will also doe them good sometyne to burne them: beeyng re-
moued,

mooued, it springeth verie soone and well, beynge sette of settes
 foure fingers long or more, after the setting of the tenen starcke
 and after remoued in a Westerly wind, and sette a boote a sun-
 der, and often digged. The olde Rospars muste haue the Earth
 loosed about them in Februarie, and the dead twiggess cutte of,
 and where they waxe thinne, they must bee repayed with the
 young springes. To haue Roses of fyue sundry colours vppon
 one roote, make when they begin to burge, a fine hole beneath
 in the stocke vnder the roset, and fyl it with reddie colour made
 of Brasell sodde in water, and thrust it in with a cloute, and in
 the like sort put into an other parte of the stocke greene colour,
 and in an other yelowie, and what other colours you will, and
 couer the holes well with Ore dooing and Lome, or very good
 earth. If you will haue your Roses beare betymes, make a litle
 trenche two hande breadthes of rounde about it, and poure in
 hotte water twyse aday, and thus dooing (as Democritus pro-
 miseth) you shall haue Roses in Ianuarie. You may preserue
 Roses before they open, if making a slitte in a Reede, you en-
 close the blossome, and when you would haue freshe Roses, take
 them out of the Reedes: others put them in Earthen Pottes
 close couered, and set them abrode: the Roses continue alwayes
 freshe that are dypte in the Dregges of Oyle. If you will haue
 them at all tymes, you muste set them euery moneth, and dooing
 them, and so (as Didymus sayth) you shall haue them continu-
 ally. To cause them, or any other flowres to growe double, put
 two or thre of the seedes in a Wheate strawe, and so lay them
 in the ground. If you sette Garlicke by your Roses, they wilbe
 the sweeter: the dryer the ground is where they growe, the
 sweeter they will be, as it appeareth by the season of the yeere,
 for some yeeres they are sweeter then others: the Rose wyll be
 white, that is smokte in with Brimstone, when it beginneth to
 open: amongst all Roses, those are most to be commended, that
 they call Carnations and Prouincials. The Oyle of Roses was
 greatly had in estimation euen in Homer his tyme, and at this
 day the Vineger of Roses is greatly vled. Next vnto the Rose
 in woorthinesse, for his sauour and beautifull whitenesse is the
 Lilpe, called in Greeke κεινον and λευκον, in Italian Giglio, in

Ros 26 in one 20
 of 5 generall
 colours.

Sap^r Porto
 to Saint Euse
 in January.

to haue 20/26
 every month

To raise them
 20/26 or any
 other flower
 to growe double.

Lilys.

The second Booke entreatynge

Spanishe *Tirio*, in French *Fleur de Lis*, in Dutch *Lilien*. The Greekes holde opinion, that it sprang fyrste of *Iunos* Milke sprinkled vppon the ground. In Februarie we begiune to sette Lillies, or if they grewe before, to loose the earth about them with a Rake, takynge good heede that the young tender shootes about the roote be not hurt, nor the little head: which taken from the olde roote, we sette for newe Lillies. As the Roses are, so are the Lillies, the sweeter, the dyer the ground is wher they growe: Lillies and Roses beyng once sette, continue both verie long. There are redde Lillies made so by arte, for they take the stalkes and rootes of the Lillie, and hang them in the smoke till they wyther, and when the knottes begyn to vncouer, they are layde in Marche in the Lees of redde Wine, till they be coloured, and then sette in the ground with the Lees powdered about them, so wyl they come to be purple. Violet in Greeke is *Ιω*, in Latine *Viola*, Violet blacke, and Violet purple, *Ιω μέλαν*, & *Ιω πορφυρέα*, in Italian it is called *Viola porporia*, in Spanishe *Violeta*, in French *Violets de Mars & Careme*, in Dutch *Fiolen*: these although they growe wylde about euerie Hedge and Wall, yet are they sette in Gardens with other flowres. There are sundry sortes of Violets, both of kinde and colour, but the ordering of them is in a maner all one.

Violets,

THRA. I haue now heard yenough of Kitchin hearbes and flowres, therefore now, I praye you, let me heare you saye somethynge of the thirde sort, that is Physicke hearbes, for mee seemeth I see a greate sorte of healyng hearbes here in your Garden.

It is but the opinion of a Gardner.

MARIVS. Nature hath appointed remedies in a redynesse for all diseases, but the craft and subteltie of man for gaue, hath deuised Apothecaries shoppes, in whiche a mans lyfe is to be solde and bought, where for a little tyme, they fetch their medicines from Hierusalem, and out of Turkie, whyle in the meane tyme euery poore man hath the right remedies growynge in his Garden: for if men would make their Gardens their Physitions, the Physitions craft would soone decay. You knowe what your olde freende *Cato* sayth, and what a deale of Physicke hee fetcheth out of a poore Colwort.

THRA,

THRA, I doo remember it, and that he sayth he was wont both to helpe him selfe, and his whole familie, with the hearbes of his Garden. But what hearbe is yonder with the long stalke, and the long blacke indented leaues on the toppe: if I bee not deceiued it is Bearfoote, with whose roote we vse to heale our cattell when they be sicke.

MARIVS. It is so in deede, and is called in Greeke *Εμεσος*, in Latine *Veratrum*, there are two kindes of it, the blacke and the white: the white, is that whiche the Duchemen call *Nyswurts* *Wranckrant*, the blacke they call *Kristwurts*, because it flowreth about Christmas, the Italians, the Spaniards, and the Frenchmen keepe the Greeke name. The roote of this Bearfoote they thrust through the eare, or into the breste of the beast, that is either diseased in his loonges, or hath the Burren. *Columella* seemeth to call it *Consiligo*, it groweth not in Gardens, except it be sowed: it continueth long, & loueth cold and woody ground. There standes not farre from that, an other verie noble hearbe in Physicke called *Angelica*, it is supposed to be called in Greeke *μύρρις*, and whether it be *Myrrhis* with the Latines or no, I leaue that to the Physicians to discusse: it is called with the Italians, Spaniards, Frenchmen, and Germanes *Angelica*. His roote, because it is a soueraigne remedie against the plague, and hath diuers other good operations, it is cherished in our Gardens, and beyng once sowed, it commeth vp euerie yere, it groweth also wylde in the mountayne countrey, and flowreth in Iuly and August. Here is also *Helicampant*, in Greeke *ελεειον*, in Latine *Enula*, in Italian *Enela*, in Spanishe *Enula campana*, in French *Aulne*, in Dutch *Alant*, this also is set in our Gardens for medicines sake, and we make much of it for the roote: it groweth wylde in hilly Countreys, and byr shadowy places. In Sommer the roote is taken out of the ground, and cutte in small peeces, is dyed: at this daye it is called *Enula campana*, it hath a yelowwe flowre, a leafe lyke *Hullin*, but white and hoarie at the one side. *Woozme wood*, though it growe in euery place, yet this that you see here is *Romane* or *Montike Woozme wood*, the Latines call it *Cerephium*, or *Abstinium Romanum*, the Dutchmen *Romische wormt*,

Berfoote or
Setterwort.

Angellica.

Helecom-
pany.

Worme-
wood.

The second Booke entreatynge

Sauine.

mut, the Italians *Assenso*, the Spaniards *Encensos*, the Frenchmen *Aluine* and *Absince*, this kinde is sette in our Gardens, and thought to bee the best. Sauine whiche we haue here also in our Gardens, for diuers diseases of cattell, is called in Greeke *Σαῦνη*, in Latine *Sabina*, in Dutche *Seuenboun*, in Italian as in Latine, in Spanish likewise, in French *Sauinier*, it hath leaues lyke Juniper or Cypress, alwayes greene, there are two kindes of it, one lyke the *Tamariske*, the other lyke Cypress: it is a bushe rather spreadyng in breadth, then growyng in height: the berries which he beareth, may be geathered in the ende of Sommer, or any other tyme.

THRA. But many times we see Gardens to be destroyed with woxines and vermine, what remedie haue you for this?

Quere vbi?
folio 20

Against Caterpillers.

MARIVS. Of the faultes of the ground, and the remedie thereof, as the amending of eyther too much moisture or drynesse, I spake in the beginning, touchyng *Uoxines*, *Flies*, and other vermine that annoy the Gardens, whiche for the most parte are these, *Caterpillers*, *Snayles*, *Moles*, *Wyle*, *Snats*, and *Antes*. There are that saye, that if you mingle with your seedes Soote, or the ioynt of Houselecke, or Singreene, the Caterpillers will not meddle with the hearbe that springeth of such feede, and that they will doo no harme to your Trees, if you sprinkle them with the water wherein the ashes of Vines hath been layde: moreouer, the stalkes of Garlick made in bundels, and burnt in Orchards or Gardens, destroyeth the Caterpillers. They will not breede (as they saye) if you burne about the Rootes of your hearbes or trees, quicke Brimstone and Lym: the same they report of Lye made of the Figge tree. *Antes* will not annoy your Corne or Hearbes, if you encompasse it round with chalke, or put into their hilles, the ashes of burnt Snayles, and if some of them bee taken and burnt, the rest will not come neare the fauour: if *Asa fetida* be layde in Dyle, and powred vpon their hilles, it vtterlie destroyeth them: they wil not touch the trees nor the hearbes, if you annoynt the stalkes with bitter Lymes, or lyme layde with Dyle. You must shake of the Caterpillers in the mornynge, or late in the euening when they bee numbed; also water wherein Dill hath been sodden, caste about

in

in the Orchard when it is colde, destroyeth them. It is written, that if you set Chiches about your Garden, Caterpillers will not breed, and if they bee already bredde, you muste scethe the iuyce of Wormewood, and caste among them. The doing of Bullockes burnt vpon the coales, destroyeth Gnattes, the like also dooth byinstone: a Spunge wette with Vineger and hang-
ged vp, draweth also swarmes of Gnattes vnto it; also the maw of a Speepe newe killed, not washed nor made cleane, if it bee layde in the place where Mothes, or other suche Uermine doo vse, and couered a little the vpper part, you shal after two daies, finde all the noysome Uermine crept into it: thus must you doo twyse or thise, tyll you thinke you haue destroyed them all. Of
killpng and dymyng away Holes, Sotion the Greeke writeth, that you must take a Nut, of any like fruite, and makpng it hol-
lowe within, fyll it vp with Chaffe, Rosen, and Vymstone, af-
terward stoppe the bent holes that the Hole hath in euery place, that the smoke breake not out, onely leauyng one open, where you shal laye the Nut, in suche sort as it may receiue the winde one the backe part, that may dymy the Smoke into the Mynes.
There are also trappes to be made, for the destroying of Holes: a frame is to bee set vp vppon the newe Willes, with a peece of wood so hollowe and framed, that it may receiue (as it were in a Sheathe) an other peece of wood made in fashion like a Knife, to this is ioyned an other little sticke that lyeth in the hole, and is fastned to a Catche without, that as soone as the Hole toucheth the sticke within, he is taken presently, as it were with a payre of Sheares. Mysse are taken, if ye powre into a Platter, the thickest mother of oyle, and set it in the house a night, as many as come at it, are taken: also the roote of Bearfoote mingled with cheese, bread, floure, or grease, killeth them. Carte and verie sharpe vinegre mingled with the iuyce of Penbane, and sprinkled vppon the hearbes, killeth the Fleaes, or little blacke woormes that be in them. No kinde of vermine will annoy your hearbes, if you take a good sort of Crespyshes, and cast them in an earthen vessell with water, sufferpng them to worke abode in the Stume for the space of ten dayes, and after with their li-
cour, sprinkle your Hearbes. But I keepe you to long in this
illfaoured

Gnattes.

Moles.

Trappe for mole

Mysse.

Garden
Fleae.

The second Booke entreating

of a saoured Garden, if it please you we will walke into the Orchard adioyning.

Of Orchards.

THRA. With a verie good will, although the goodly faire colour and sweete saours of these hearbes and flowres, besyde the fayre headges enclosing it as it were with a gorgeous grene tapestry, make me that I could abide here euer.

MARIVS. Both the Garden and the Orchard are inclosed with seuerall hedges and ditches, whereby they are defended from hurtfull beastes and unruly folkes (as I tolde you at the fyrst) when I began to speake of the enclosing of Gardens and Orchards.

THRA. Euery thing liketh mee passing well: Good Lord what a pleasaunt ground, what a Paradise is this? mee thinkes I see the Orchards of *Alcinous*, the trees are set checkerwise, and so catred, as looke whiche way ye will, they lye leuell: Kyng *Cyrus* hymselfe neuer had better. If *Lyfander* had euer seen this Orchard, he would haue wondred a greate deale more, then hee did at *Cyrus* his Orchard.

MARIVS. Such gorgeous Gardens and Orchards as Princes haue, I neither desire, nor meane to counterfeyte: but vsing the diligence of a poore Countrey Gardener, I buylde (as they saye) my Wallles accordyng to my wealth. I framed the order, and sette the most part of these trees with myne owne handes, folowynge herein, the Fathers of the olde tyme, who delighted them selues cheefely with this kinde of Philosophie. So then (as I thinke) the Trees and Wooddes to be the greatest commoditie giuen to men: for besides the house pleasure that they minister vnto vs, the gracious Lorde, that is the giuer of all good thinges, hath also geuen vs a number of other goodly commodities by them, whiche at the first serued men for foode, couering, and clothing: which commodities, the very Ethnickes had in estimation. But vnto vs that knowe God, by whom wee haue receiued our preheminnence aboue al other creatures, which benefite wee ought with thanks to acknowledge, the holie Scripture dooth teache a more hygher and mysticall consideration: for befoze that gracious Lorde had framed man, willing to prouide hym of foode and apparell, he caused all kinde of pleasant

pleasant trees bearyng fruite to Spring out of the earth, that they might serue for the sustenance of man: and in the midst Iye planted the Tree of lyfe, and there by, the Tree of knowledge of good and euill, to the ende that Adam might haue an assured signe of his duetie and reuerence towardes God, out of whiche the Lorde (as in a Temple did speake vnto Adam) and Adam hym selfe, if he had continued in his innocencie after his refection of the Tree of lyfe, had with his posteritie preached GOD, and alwayes been thankfull vnto hym, for his auctoritie giuen vnto hym ouer all other creatures, as the Propheticall Psalmist singeth. This that sheweth the bountifull liberalitie of God, was geuen vs to so good an ende; the vngodly and wicked posteritie turned to idolatrie, consecratyng both Trees and Groues, to the idoles of the Heathen.

T H R A. What: mee thinkes you begin to play the Preacher with mee.

M A R I V S. Surely, there is no better a place to preache in them here, to acknowledge the Creator in his Creatures, and by these visibill woorkes, to beholde the Almighty and euerlasting power, blessednesse, bountifullnesse, and Godhead, of the incomprehensible woorkman, and alwayes to speake and preach of them: but I will say more hereafter. The plantyng of Trees dooth out of all doubt (as I sayde) bring vnto vs both profite and pleasures: and therefore this part of husbandry, must not be neglected, for Columella accountes it one of the cheefest poyntes of husbandry, whiche the Poete seemes to agree vnto,

Of tyllage all this while, and of the starres

We here haue talked.

And Bacchus now of thee I meane to syng, &c.

T H R A. I praye you then declare vnto mee, the order of plantyng and preseruyng of Trees.

M A R I V S. Let vs first sitte downe vnder the shadowe of this fayre Vine, that yeldeth both pleasant Wine, and comfortable shadowe.

T H R A. Agreed.

M A R I V S. The sortes of trees are diuers and manifold: some growe wilde, some come of the seede, some of the roote, as the

The second Booke entreatynge

the selfe same Poet sayth.

Some sortes there are, that of the seeds are sowne.

And some that sette of rootes, so seedes are growne,

Some doo growe and spring of them selues: a number of others againe are to bee sowne. Those that growe wylde without the labour of man, doo beare their seedes eache one accordyng to his kinde: but those that are sette and drest, doo yeele greater encrease. There are diuers agayne that are alwayes greene, and doo neuer loose their leafe, which are (as *Constantine* reporteth) these, the Date, the Drenge, the Lemon, the Eytrom, the Bay, the Olyue, the Cypresse, the Yvine, the Hollie, the Bor, Mytell, Ceder, and Iuniper. As for strange trees, and those that will growe no where but at home, we wyl not meddle withall: we will therefore begin first with those that yeele us sustenance, and beare fruite, and those are diuided into three sortes: for either of the settes they come to bee trees as the Datiue is, or else shrubbes as the wylde Date, or neyther Tree nor shrubbe as the Vine.

THA. I desire to heare your opinion of euery sort, for I thinke it no small skill to plant such fayre Gardens, Orchards, and Vineyards. Hee thinkes you haue vled a woonderfull good order, that amongst your Vines, you haue entremedled Olyue trees, Figge trees, Almondcs, and Abyrocoets, and that you haue seuered your Orchard from your Garden, and your Vineyard from them both, with fayre hedges and dytches.

MARKE. It was needefull so to doo, least my Folkes labouryng in some of them, should come into the rest, contrarie to my pleasure. First if you will, I will speake of those that byyng vs fruite, and then of the wilde, and the order of settyng and plantyng of Wooddes. First (as our *Calymella* sayth) that ground that serueth for an Orchard, will serue for a Vineyard, as you see it dooth here: and if the ground be hilly, rugged, and vnclen, it is more meete for a Vineyard then for an Orchard. If therefore you will make an Orchard, you must choose suche a ground as is meete for it: a ritche ground, tenell, and lpyng vpon the Sunne, whiche when you haue founde, you must well enclose it, as I taught you before in the enclosure of Gardens,

that

These shalbe
found.

Howe to
make an
Orcharde.

that it maye lye out of daunger of Cattell and Knaues: for although that the trampling, and douging of cattell, is not vnprofitable to the trees, yet if they be eyther brused, or broken whiles they bee young, they wyll soone come to nought. When you meane to dresse your Orchard place thus fenced, you shall make your furrowes a peere before you plant them, so shall they bee well seasoned with the Sunne and the Rayne: and what so euer you plante, shall the sooner take. But if you wyll needes plante the same peere, that you make your furrowes, let the furrowes bee made at least two monethes before: after, fill them full of strawe, and set it on fyre. The broader and the wyder that you make your furrowes, the sapper and more fruitfull will your trees be, and the fruite the better. Your furrowe must bee made like an Ouen, or Furnace, wider at the bottome then above, that the roote may spread the better, and the colde in Winter, and the heate in Sommer, maye the better bee kept from it, and also in steepe groundes, the earth shall not so easely be washed awaye. In setting of our fruite trees and Vines, you must place them in order, either Checkerwyse, or Netwyse: whiche needefull order of setting, is not onely profitable by receiuing the ayre, but also very beautifull to the eye: when as, whiche way so euer you looke, you shall see them stande in ranke, and whiche also is to good purpose, the trees shal equally receiue their moysture from the ground.

THRA. I see the Gardners in euerie place obserue this order, setting their trees in such proportion, as whiche way so euer you looke, your eye shall not be let, but shall see the Trees stand straight in order.

MARINS. I haue vsed two sortes of this catted order, one wherin my Trees stande foure square like the Chequer or Chessboard: the other not in square as the first, but losing wyse or Diamonde wyse like the Glasse windowes or Nettes. You must frame it accordyng to the nature of the trees, lest the lower sort bee drowned of the higher. You muste also set them a good distaunce a sinder, that their branches may spreade at pleasure, for if you sette them to thicke, you shall be able to loue nothing betwixt them, and they will be the lesse fruitfull. Therefore Pa-

make yo holes for
yo stakes one yer
before you set
them

or at least if
monethes

.....
.....
.....
.....
.....

two sortes of the
rattell order one
square the other
losing wyse, or
like a diamond
like nett work or
glasse, folio 103
like the netts of a
ladder. See ::

The second Booke entreatyng

30 foote wide

Dropping of
trees.

Freendship
amongst
trees.

(Shaddowes
of trees.

ladies woulde haue the space betwixt them; thirtie foote at the least: there is more profyte in the generall disposing of them, entermiedying the greater with the lesser, so as the greater ones doe not annoy their underlynges, eyther with theyr shaddowe or dropping, for that they growe not equall to them in strength or bignesse. Pomegranates and Myrtels must be sowed nearer together, as wene foote a sunder, Apples nearer then they, and Beares nearer then them both, but of them there are sundry sortes, Almonds and Figge trees, must also bee set nearer. And because there is a naturall frendshippe and loue betwixt certayne trees, you must set them the nearer together, as the Vine and the Olive, the Pomegranate and the Myrtell. On the other side, you must set farre a sunder, suche as haue mutuall hatred among them, as the Vine with the Filbert and the Bay. There are some of them, that desyre to stande two and two together as the Chestnut: the droppinges also doo great hurt of all sortes, but specially the droppinges of Oks, Pinetrees, and Hawthornes. Moreover, the shaddowes of diuers of them are hurtfull, as of the Walnut Tree, whose shaddowe is unhol-
some for men, and Pine Tree that kylleth young sprynges: yet
they both resist the winde, and therefore are best to be sette in the outer sides of the Orchardes, as hereafter shalbe sayde. Of the place and the order, perhaps you thinke I haue sayde ynough; and looke that I shoulde procede to the order of plantyng and setting.

THE FIRST. What tyme is the best for plantyng and setting of trees.

MARIVS. The cheefest tyme of plantyng (as Florentine sayth) is the ende of Sommer, for then is nature most occupied about the Roote, as in the spring about the upper partes: and therefore grafting is meetest in the spring, and setting in the ende of Sommer: for the plantes are watred all the Winter, and therefore it is best setting or plantyng, from the setting of the seven starres, untill the twelfth of December. In the spring tyme, you may sette those thinges that you forgotte before, at what season soeuer it bee: looke that you sette them in the after-
noone, in a fayre westerly winde, and in the wane of the Moone.

Plinie

Time of
plantyng. in
the ende of
summer from
the setting of
the 7 starres
full the 12 of January
Time for
grafting. in
the spring
Ratto
notanda

Plinie saith, that this note is of greate importaunce for the encrease of the Tree, and goodnesse of the fruite: If the Tree bee planted in the encrease of the Moone, it groweth to bee verie greate: but if it bee in the wane, it will bee smaller, yet a greate deale more lastyng.

The obseruation of the Moone.

THRA. But are there more waies then one of Plantyng and settyng?

MARIVS. A greate sorte: we plant either by graftyng, settyng of the kernell, or the stone, settyng the rootes, stockes, or slippes, graftyng betwixte the barke and the Tree: some are planted in some of these sortes, others in all. In Babilon (as thei saie) onely the leafe sette, comes to bee a Tree, firste I will speake of Graftyng, and then of the reste. There are that appointe but three kindes of Graftyng, betwixte the barke and the wood, in the stocke, and emplastryng, or inoculation. The firste sorte thei call Graftyng, the seconde imbranchyng, the third inoculation, or imbuddyng. Suche Trees as haue thickest barkes, and drawe moste Sappe from the grounde, are beste Grafted betwixte the barke and the wood, as the Figge, the Cherie, and the Oliue: those that haue thinnr rindes, and contente them selues with lesse moisture, as if the Sappe leauyng the barke, shoulde gather it self to the harte, as the Drengge Tree, the Apple Tree, the Vine and diuers others, in these it is beste to open the stocke, and graffe in the woode. Some Trees are also beste grafted vpon other some, the Figge that prospereth beste vpon the Hulberie stocke, and the Plane Tree: the Hulberie vpon the Chestnut, and the Beeche, the Apple, the Pearre, the Cume, and the white Poplar, wherein if you Graffe, you shall haue your Hulberies white: vpon the same stocke are grafted the Pearre, the Quince, the Medler, and the Seruiss: the Pearre vpon the Pomgranate, the Apple, the Quince, the Hulberie, and the Almon. If you graffe your Pearre vpon a Hulberie, you shall haue redde Peares: the Apple is grafted vpon all Pearre stockes, and Crabbe settes, Willowe, and Poplar: beyng grafted vpon the Quince, it byngeth forth the fruite whiche the Greekes call *Melimela*: it is also grafted vpon the Plomtree, but beyng grafted vpon the Plane Tree, it byngeth forth the redde Apples.

The kindes of planting and grafting of trees.

Three kindes of grafting.

What trees are best to be grafted betwixt the barke and the wood.

What trees agree best together.

my lord 2006 to be provided

To haue redde Peares and Apples.

The second booke entreating

Nota

A Peache
with an Al-
mond in it.

y Damson

y Chestnut.

Ohyue graps

The choyse
of grafting.

The Medlar being grafted vppon the Thorne, the Grafte groweth to greate bignesse, but the stocke continue we small: vppon the Pine Tree, it bringeth a sweete fruite, but not lasting. The Peache grafted in the Thorne, or the Beeche, groweth to be verie faire, and greate: the Almonde and the Peache being ioyued together, and grafted in the Plomtree, will beare a Peache with an Almonde in the stone. The Filbert will onely bee grafted in the Alder, not agreeing with any other. The Pomegranate delightedh in diuers stockes, as in the Willowe, the Bape, the Ashe, the Damson, the Plome, and the Almonde, vppon all whiche he prospereth well. The Damson groweth verie well vppon any kinde of wilde Peare, Quince, and Apple: The Chestnutte liketh well the Malnutte and the Beech. The Cherrie refuseth not the companie of the Peache, nor the Turpentine nor thei his: the Quince will well bee grafted vppon the Barberie: the Nirtell vpon the Sallowe: The Plome vpon the Damson: the Almonde vpon the Filbert: the Citron, because of his tender Tree, and thinne rinde, will scarcely beare any other grafted, and therefore contentes hym self with his owne braunche. The Vine that is grafted vpon the Cherrie Tree (as Florentinus promisseth) will beare Grapes, and grafted vppon the Oliue, will bring forth a fruite, that bearyng the name of bothe his parentes, is called *Elaeostaphilos*. In fine, all younge Trees that haue Sappe in the barke maie bee grafted: if it bee greater, it is beste grafting nere the roote, where bothe the barke and the wood, by the reason of the nerenesse of the grounde are full of Sappe. We then that will graft either in the stocke, or betwixt the stocke and the rinde, let him geather his grafted from a fruiteful tender tree, and full of ioyntes, and out of the new spring, except he meane to graffe an olde tree, when as the sturdier the grafted be, the better they are, otherwys the last shootes of such trees as haue lately borne will be the best. You must geather them on that side the tree that lieth vpon the North, others like better the East side, then the shadowie. Virgill forbiddeth those that growe vppon the toppe, thinkyng them better that growes out of the side. To be shorte, your grafted muste bee full of buddes lately growne out, smoothe, the rinde smoothe, good, and ready to growe: thei must

musste bee of the laste yerres growth, whiche is knowne by the knottes or ioyntes, that declare euery yerres growth: Beside, grafes of all Trees are not to be gathered alike: for Vines and Figge Trees are dyest in the middle partes, and take beste of the toyne, and therefore from thence you must gather your grafes. Oliues are fullest of Sappe in the middest, and the outer partes dyest. Those beste agree together, whose rindes are nereste of Nature, and dooe blossome, and beare bothe aboute a tyme. You must gather your Grafes in the wane of the Moone, tenne daies before you Graffe them. *Constantine* addeth this reason, that it is neede the Graffe dooe a little wither, that he maie the better bee receiued of the stocke. You must appointe your grafing tyme in the Spynge, from Marche, when as the buddees dooe beginne to burgen, but not come out (although you maye graffe the Peare when his leaues bee out) untill Maie: for grafing in Raine is profitable, but not for imbranchyng. The Oliue, whose spynges doo longest budde, and haue muche Sappe vnder the barke, the aboundance whereof doeth hurte the graffe, musste bee grafted (as *Florensine* saith) from Maie, till Iune. *Columella* would haue the Oliue grafted from the twelfth of Marche, till the first, or sixth of Aprill, and the time of grafing, to bee the Moone encreasyng, in the after Moone, when there bloweth no South winde. When ye haue founde a good graffe, take your knife (being verie sharpe) and pare it about a three fingers from the ioynte doune ward, so muche as shall bee meete to bee sette in the stocke: that parte that is vnder the ioynt (not perishing the pith) you must cutte with your knife, as if you should make a penne, so as the wood with the wood, and the barke with the barke, maie ioyne together, as iust as maie bee. Whiche being doen, if you meane to graffe the stocke, you must firste sawe it smoothe, and then cleaue it in the middest with a sharpe knife, aboute three fingers: and to the ende you maie handsomely putte in your graffe, you muste haue a little wedge of woode or Iron, (*Plinie* thinkes it better of bone) whiche wedge (when you will graffe betweene the rinde and the stocke) musste bee made flatte on the one side, and rounde on the other, and the graffe must be prepared also flatte on that side that must stande nexte the wood, ca-

The knottes

when y grafes
ar to be gathered

The time for
grafting. is best
in March.

Ae mond encre-
asyng. & in the
after Moone. &
no south winde.

The maner of
grafting.

wedge of Bone
or woode.

The second booke entreatyng

kyng alwaies good heede, that the pithe bee not perished: The other parte must onely haue the rinde pulled of, whiche after you muste sette in the cleft, or betwixt the barke, till you see all partes agree together. Some doe cutte the pointe of their Grafte thre square, so as twoo sides are bare, and the other couered with his barke: and in that sort thei vse too graffe in a stocke one against another, but it is thought best to graffe no more but one. When you haue thus sette in your Grafte in the stocke, plucke out the wedge: but here is a greate carefulnesse, and heede to be vsed. And therefore, good grafters thinke it best to hold the graffe euē with both handes, least in the binding and pulling out of the wedge, the graffe be hurt, or stande vneuen. For auoyding of whiche, some vse for to binde the stocke about, and after to put in the wedge, the bandes keeping it from opening to wide. The harder they be sette in, the longer will they be eare they bears, but will induer the better: you must take heede therefore, that the cleft be not to slacke nor to strait. When you haue thus grafted, binde the stocke with a twirge, and couer it with Loame, well tempered with Chaffe, two fingers thiknesse, and (putting Masse rounde about it) tye it vp so, that there come no rayue at it, nor be hurt with the Sunne or the Winde. This is the order bothe in the olde tyme, and at this daie vsed: though in Columel-
las tyme (as it appeareth) they were not woout to graffe, but onely betwixt the barke and the Wloode, for the olde people as *Plinie* writeth) durste not as yet meddle with cleauyng of the stocke: At length thei presumed to make holes, and graffe in the pithe, and so at laste wared bolde to cleaue the stocke. *Cato* would haue the stocke couered with Claie and Chalke, mingled with Sande, and Dredoung, and so made in Porter. Sometime they graffe with the toppe of the Grafte doune warde, and thei dooe it to make a little Tree spreade in breadth. It is beste grassyng nerte the grounde, if the knottes and the stocke will suffer: and *Plinie* would haue the graffe growe forth not aboue sixe fingers. If you will graffe a little Tree, cutte it neare the grounde, so as it bee a foote and a halfe hye. If you would carrie your graftes farre, thei will longest keepe their Sappe, if thei bee thrust into the roote of a Rape: and that thei will bee prefer-

ued,

Boyle grafting
into the ground
of stocke being but
one rubbe high
To keepe
your graftes.

ued if thei lye betwixte twoo little guttes, rumpung out of some Riuer, or Fische ponde, and be well couered with earth.

THRA. I doe now greatly desire to heare you saie some thyng of emplastering, or inoculation, that is, in graffing with the budde or the leafe, whiche you call in Greeke Εμφυλλισμὸν whiche kinde of graffing, I see those that are giuen to newe fashions delight muche in.

if y^e 3 sort
Of implaste-
ring and in-
oculation.

MARIVS. This is no newe maner of Graffing, but we finde that it was vled bothe of the Latines, and of the Grekes, when takyng of a leafe or little budde, with some parte of the rinde with hym, we graffe it into an other branche, from whiche we haue taken as muche barke. This order Columella saith (the housebandes in his daies were wonte to call emplastering, or inoculation: and before Columellas daies, Theophrastus in his booke De causis Plantarum, dooeth shewe the reason of inoculation. Plinie doeth saie, it was firste learned of Dawes, hidyng of seedes in caues and holes of Trees. This kinde of Graffing, as Columella doeth write, and our Gardners the selues confesse, is beste to be vled in Sommer, about the twelfth of Iune: yet Didymus saith, he hath Graffed in this maner, and hath had good increase with it in the Spryng tyme. And lithe it is the daintiest kinde of Graffing, it is not to bee vled in all Trees, but alonely in suche as haue a strong, a moiste, and a sappie rinde, as the Oliue, the Peach, and the Fig, whiche are full of Milke, and haue a bigge barke. Of that tree that you meane to Graffe, choose the youngest and the fairest branches you can, and in them take the budde that is likeliest to growe, and marke it round about twoo ynches square, so as the budde stande euen in the middeste, and then with a sharpe knife cutte it rounde aboute, and flawe of the rinde, takyng good heede you hurte not the budde, and take out the peece. Afterwardes, go to the tree that you meane to Graffe on, and choose likewise the fairest branche, and pare awaie the rinde a little space, and ioyne in your budde so iuste, as the rindes maie agree together so close, as neither Water nor Wind maie enter in. You must looke that you hurte not the Wood, and that the rindes bee of one thicknesse. When you haue this dooen, binde it vp, so as you hurte not the budde: Then claie it ouer all,

Inoculation

the time of
Inoculation

Inoculation is
best in the Olyue
ye Peach, & ye figg

y^e rindes must be
of one thicknes.

The second booke entreatyng

After xxj. daies
the bondes ar
to be untied

Wymble
grafting.

leauyng libertie penough for the budde. Cutte of all the spryng
that growes aboute it, that there bee nothing leste to drawe a-
waie the Sappe, but that it maie onely serue the Grafte: After
one and twentie daies, vnlouise it, and take of your couerpyng, and
you shall see your budde incorporated in the bryanche of a strange
Tree. *Columella* speaketh of an other sort of Graftyng, to bore a
hole in a Tree with an Augur, either to the pitche, or the utter-
moste rinde, goyng sonethyng floapewise downeward, and get-
tyng out all the chyppes cleane, take a Vine, or an arme of the
beste Vine, not cutte from his old mother, and parpyng awaie the
ouer rinde, thrust it faste into the hole bryng all moiste and full of
Sappe, leauyng a budde or two onely vpon it: after ward, stopp
the hole well with Masse and Claye, and commit it to the earth.
In this sorte maie you Grafte Vines vpon Elmes, so shall the
bryanche liue, beyng bothe nourished by his olde Father, and his
newe Father. Two yere after you shall cutte of the newe graf-
ted bryanche, and the stocke wherem you Grafted, you shall saw of
a little aboue the boyng, so shall the Grafte become the cheefest
parte of the plante. The like doe our Countrey menne, takyng a
bryanche of a Beeche a foote thicke: And when thei haue cutte it;
and bored it, thei sette in it the bryanches of the best Pearre or Ap-
ple that thei can gette, setting the same in a verie wette grounde
in Marche, and in the same Moneth the yere after, takyng vp the
Beeche, thei cutte it a sonder with a sawe, betwixte the holes and
the bryanches: and euery pece of stocke with his bryanche, thei
sette in verie ritche and fruitefull grounde. There are some that
bragge of an other kinde of Graftyng, not muche vnlke too the
former, whereof notwithstanding, *African* in *Constantine* ma-
keth mention, as tried in a Peach. They will a man to take the
bryanche of a Willowe as bigge as your arme, and two Cubi-
tes in length, or more: this thei would haue you to bore through
the middes, and after slippyng of the bryanches of a Peach as he
standes, leauyng onely the toppe vntouched, thei would haue you
too make the Peach passe through the Willowe batte, and that
doen, to bow the Willowe like a Bowe, setting both his endes
into the earth, and so to binde vp the hole with Masse, Morter,
and bandes. The yere after when as the heaf of the Peach, hath
ioyned

† An other ma-
ner of grafting

ioyned him self with the pithe of the Willowe, that bothe the bodies are become one. You shall cutte the Tree beneath, and remove it, and raise up the earth, so as you couer the Willowe bowe with the toppe of the Beache: and this shall bring you Beaches without stones. This kinde of Graftyng must bee dooen in moiste places, and the Willowes muste bee holpen with often waterynges, that the nature of the Tree maie bee of force. The Kindes and maners of propagation, are declared by Plinie, who telleth of twoo Kindes: the firste, wherein a braunche of the Tree beyng bowed downe, and buried in a little furrowe, and after two yerres cutte of, and the plant in the third yere removed: whiche if you entende to carrie any farre distaunce of, it is beste for you too burie your branches in bakettes, or earthen vessels, in whiche you maie appliest carrie them. And an other more delicates waie he speaketh of, whiche is to gette the roote out of the verie Tree, laiyng the braunches in bakettes of earth, and by that meanes, obtaining rootes betwixte the verie fruite and the toppes (for by this meanes the roote is fetched from the verie toppe, so farre they presume) and from thence fetch them, vsyng it as before: in whiche sorte you maie also deale with Rosemarie and Sawine.

to have pearkes wth owt stones.

Propagation, and his Kindes.

† Colmella. sheweth a waie, howe slippes of all maner of Trees maie bee Grafted in what Trees you liste.

T H R A. And some are also sette of the slippes, or sluynges: I mee self haue plucked a braunche from a Mulberie Tree, and broosyng the ende a little with a Ballet, haue sette it in the ground and it hath growen to be a faire Tree: The like hath been tried (as thei saie) in Apples and Peares.

Mulberie Tree will easily grow

M A R I V S. You saie well, for Nature hath shewed vs, that the young sciences plucked from the rootes of the trees will growe: the youngest are beste to bee planted, and so to bee pulled up, as thei maie bryng with them some parte of their Mothers bodie. In this sorte you maie plante Pomegranates, Filbertes, Apples, Seruilles, Medlars, Plomes, Figges, but speciallie Vines, and sometymes Cheries, and Nirtelles. Of the stocke and the braunches are also planted the Almonde, the Peare, the Mulberie, the Dreng, the Oliue, the Quince, the Iuie, and the Turkishe Plome: whiche the oftener you remove the, the better

R. iij.

thei

The second booke entreating

thei prooue. *Plinie* saith, the bryanches cutte from the Tree, were at the firste onely vsed for Hedges, Elder, Quinces, and Briers medled together, after wardes for vse, as the Poplars, the Alder, and the Willowe, at this daie wee sette them where wee beste like. Weede must bee taken, that the stockes, or the settes be of a good kinde, not crooked, knottie, nor forked, nor slenderer, then that a man maie well gripe with his hande, nor lesse then a foote in length.

THRA. It remaineth now, that you speake of the setting of the fruite or kernell.

MARIVS. Nature (as *Plinie* saith) hath taught vs to sette the kernell, by the seedes deuoured of Birdes, and moistened with the warmth of their entrailles, and after voyded in the boughes and rises of Trees: whereby wee finde many tymes a Plane Tree growing out of a Bape, a Bape out of a Cherrie, and a Cherrie out of a Willowe. Many Trees are sette of the fruite, kernell, or stone, whiche growe perely of them selues, by reason of the falling of the fruite: as Chestnottes, Haselnottes, and Walnottes. *Columella* saith, thei are the fruitefuller trees that synng of their fruite, then those that are sette of the stocke, or the bryanche. Some delight to be sette in Trees, and not in the ground: and when thei haue no soile of their owne, thei liue in a stranger. Of the fruite or kernell, are planted Nuttes, Almonds, Pistaces, Chestnottes, Daisions, Plomes, Pineapples, Dates, Cypress, Bapes, Apples, Peares, Maples, Fir trees, Cherries, Peaches, and Abricoties: But sette or planted, thei prooue to be the kindlier. Some of these doe growe in Grassyng and other waies: for experience teacheth, that the Nutte and the Terebinth are Grafted, and *Demagron* witneseth as much: neither are all frutes, kernelles, and stones sette in like sorte, as hereafter shall bee seen. Some are laied in water before, others not: some lye three daies in honie and water, and at the fall of the leafe, are buried in the ground till Marche: and then sette Nuttes are onely laied in moiste douny a daie before, and of some in water and honie onely a night, lest the sharpenesse of the honie destroye the sproute. Some are sette with their toppes standyng upward, as the Chestnutte: others downeward, as the Almond, though

Nota #

y^e plaine tre will grow out of y^e bay, a bay out of a cherrie, & a cherrie out of a willow

Trees y^e grow out of y^e fruite or kernell.

The keepyng of Plantes.

though this is not greatly to bee regarded, sith we see the fruite that falters from the Tree, or is let fall by Birdes, doeth prosper best of any other.

T H R A. I haue a woonderfull delight in the Impe Gardens of these Countreys, I praye you tell me howe thei bee ordered.

M A R I V S. The orderyng of an Impe Garden maie not bee passed ouer, wherein as in a Parke, the young Plantes are nourished. And because the Nurse sometymes ought to bee kiner and tenderer then the Mother, a meete grounde muste bee chosen for the purpose: that is, a grounde drie, fatte, and well laboured with the Paddocke, wherin the straunger maie bee well cherished, and verie like vnto the soile, into whiche you meane to remoue them. The kernelles, or stones, muste not bee altogether naked, but a little couered with some parte of the fruite, so shall thei after ward endure the longer. Thei muste bee sette a foote, or there aboutes a sonder: After twoo yeres thei must bee remooued. And because their rootes dooe runne verie deepe into the grounde, thei must bee somewhat bente, or turned in, to the ende thei maie spreade abroade, and not runne downe-ward. Aboue all thynges, you muste see it bee free from stones and rubbishe, well fenced against Poultrie, and not full of chynkes or cleftes, that the Sunne burne not the tender rootes: thei must bee sette a foote and a halfe a sonder, that thei hurte not one the other with their neare growyng. Among other euilles, thei will bee full of Wormes, and therefore must bee well raked and weeded: beside, growyng ranke, thei must be trimmed and pruned. Care would haue them couered ouer with Lattises vpon Forkes, to lette in the Sunne, and to keepe out the colde. Thus are the kernelles of Peares, Pineapples, Nuttes, Cipresse, and suche others cherished. Thei must bee gently watred for the first three daies, at the goyng downe of the Sunne, that thei equallie receiuyng the water, maie open the soner. Zizipha, or Turkey Plomes, Nuttes, Walnuttes, and Chestnuttes, Bayes, Cherries, Pistaces, Apples, Dates, Peares, Bayles, Firres, Plomes, and diuers others, are sette of the stone, or kernelles. In remouyng of them, haue speciall regard, that thei bee sette in the

Of Impe Gardens, and Nurseries for fruites growe.

trees sett of stones, & kernelles

R.v.

like

The second booke entreating

like soile, or in better, not from hotte and froward groundes, into cold and backward, nor contrary from these to the other. You muste make your Furrowes so long before, if you can, that they bee ouergrowen with good mould. *Mago* would haue them made a yere before, that they maie bee well seasoned with the Sunne, and the weather: Or if you can not so, you muste kinde fires in the middes of them two Donethes afore, and not to set them, but after a shewe. The deapth of their setting must be in stiffe Claie, or harde grounde, three Cubites: and for Plome Trees, a handfull more. The Furrowe must be made Furnace like, straight aboue, and broade in the bottome: and in Blacke mould, two Cubites and a hande broade, beeing square connected, neuer deeper then two foote and a halfe, nor broader then two foote broade, nor neuer of lesse deapth, then a foote and a halfe, whiche in a wet ground will drawe nere the water. Suche as delight in the deapth of the ground, are to bee sette the deeper, as the Olive, and the Oliue: these and suche like, muste bee sette lower foote deepe, the others it sufficeth if they stande three foote deepe. Some vse to sette vnder their rootes rounde little stones, bothe to contayne, and conueigh awaie the water: others laie grauell vnderneath them. The greater Trees are to bee set toward the North and the West, the smaller toward the South and the East. Some will haue no Tree remoued, vnder two yere old, or aboue three: and others when they bee of a yeres growth. *Cato* resisteth *Virgilles* authoritie, that it is to greate purpose, to marke the standing of the Tree, as it grewe at the firste, and to place it towarde the same quarters of the heauen againe. Others obserue the contrary in the Vine, and the Figge Tree, beeing of opinion, that the leaues shall thereby bee the thicker, and better defende the fruite, and not so soone fall: beside, the Figge Tree will be the better to be climbed vpon. Moreover, you must be ware that by long taryng, the rootes be not withered, nor the winde in the North when ye remooue them, whereby many tymes they dye, the housebande not knowyng the cause. *Cato* condemneth utterly all maner of windes stormes in the remoouyng of Trees, and therefore it is to greate good purpose, to take them vp with the earth aboute them, and to couer the rootes with a turffe,

Trees to be set
aboue 2 or 3 foote
deepe.

Trees y^e as to be set
4 foote deepe

turffe, and for this cause *Cato* would haue them to bee carried in baskettes filled with earth vp to the toppe: the Tree must so bee sette, as it maie stande in the middelt of the trenche, and so great heede must bee taken of the rootes, that thei maie not be broken, nor mangled.

THRA. Lette vs now goe forwarde with euery Tree in his order.

MARIVS. Among all Trees and Plantes, the Vine by good right chalengeeth the Soueraignetie, seeing there is no Plante vsed in Housebandrie more fruitefull, and more commonious then it, not alonely for the beautifullnesse, and goodlinesse of the fruite, but also for the easinesse he hath in growyng, where-by he refuseth not almoste any kinde of Countrey in the whole worlde, excepte suche as are too extremely scorched with the burnyng heate of the Summe, or els too extremely Frozen with the behemente colde, prospering also aswell in the plaine and champion Countrey, as it dooeth vpon the Hillie and Mountaine Countrey: Likewise as well in the stiffe and faste ground, as in the softe and mellowe ground: And oftentimes in the Loamie and leane ground, as in the fatte and foggie, and in the dyie, as in the moiste and Dirie, yea, and in many places, in the verie Rockes it groweth moste aboundantlie and moste fruitefully, as is to bee seen and prooued at this daie aboute the Riuer of Rhine in Germanie, and the River of Mosell in France; and aboue all this, it beste abidech and beareth the contrary disposition of the heauens.

The Vine

THRA. No doubt it is the moste excellent Plante: but whoin dooe you suppose to bee the firste aucthour of the Planting of it? The common sorte dooe attribute the firste inuention of it to *Bacchus*.

MARIVS. Wee that are taught by Gods holie worde, dooe knowe that it was firste founde out by the Patriarke *Noah*, immediatly after the drownyng of the worlde: It maie bee, the Vine was before that tyme, though the Planting and the vse thereof, was not then knowen. The Heathen bothe moste falsely, and verie fondelie, as in many other thyn- ges, dooe giue the inuention of the same vnto the God *Bacchus*.

of the Vine.
The inuention

But

The second booke entreatyng

But *Noah* liued many yeres before either *Bacchus*, *Saturnus*, or *Uranus* were borne.

THRA. It is moste likely so: But I would faine knowe, whether the plantyng of *Vines* dooeth more enrich the Housebande, then other Housebandries doe.

The vineyard
most gainful.

MARIVS. Aboute this question there is no little adooc among the writers of olde, where there are sonie that preferre *Grasyng*, *Tillyng*, and *Woodlides* farre aboue the *Vines*: and yet againe there wantes not greate and learned menne, that as firme the *Vine* to bee moste gainfull: as declareth that old fruitfulnessse of the *Vines*, mentioned by *Cato*, *Varro*, and *Columella* whiche vpon euery Acre yeelded 700. Gallondes of *Vine*, and the Vineyardes of *Seneca*, wherein he had yerely vpon one Acre 1000. Gallondes: when as in Corne ground, Pasture, or Woodlande, if a man doe gette vpon one Acre xx.s. a yere, it is thought a greate matter.

Corne feelde
and Vineyardes
copared.

THRA. But the *Vine* asketh greate charges, and greate trauaile aboute it, and it is subiecte to many mishappes, as the colde Frostes of Winter, the blastes and burnyng of Sommer and from the first appearing, till the third of Maie (whiche is the laste decretozie daie of the *Vine*) the hurte of the colde and Frost is feared. When it hath scaped this daunger, then commeth a greater mischief, whiche lightly euery yere doeth greate harme: for either with blastes in the Dogge daies, or for lacke of raine, the Grapes are withered and spoiled, or els with ouermuche Raine thei were sowre, and not ripe. Sondrie other mishappes there happen, that the *Vine* is subiecte to.

MARIVS. I graunt: so is your corne likewise, for both it asketh greate charges, and suche casualties oft times vndoeth the poore housebande. For in all kinde of housebandrie, if there be not greate diligence, and good skill imploied, there will bee but smal comoditie reaped. And especially the *Vine* requireth great housebandrie about it, for it is tender, and some harmed, and therefore in choise of the Vineyarde, there muste bee good heede, and bothe the nature of the Countrey, and the disposition of the Heauens to bee well considered. Moste men plant their *Vines* without any greate care, or heede of them: and when the growe by,

vsc

use little diligence in the trimmyng of them, by whiche negligence, many tymes thei wither before thei bee ripe. Others againe thinke it makes no greate matter, what ground thei bestowe aboute it, and moste tymes laye out for this purpose, the worst ground thei haue, as though it would serue for this plant that will serue for no other thynge. Some againe reape all the comoditie thei can the firste yerres, not prouidyng for farther tyme, and so complaine, that their gaine doeth neither answer their traualle, nor their charges, whereas in deede their owne follie and negligence is the cause: for if there bee diligence and paines bestowed bypon it, as *Columella* proueth by many reasons, there is no housebandrie so profitable, as the plantyng of Vines.

THRA. I doe not deny but that there is greate profite in it, where the ground is meete for Vines, and not so fit for corne: other wise I thinke of sowyng of Corne to bee an easier matter, and speedier waie to enriche the Housebande.

MARIVS. Surely as touchyng the easinesse of the housebandrie, and the greatnesse of the gaine, the olde writers haue euer preferred the Vineyard afore the Corne feilde: for as *Columella* reporteth *Siserna* writeth, that the labour of one manne is sufficient for eight acres of Vines, or at the least for seuen: of the encrease I haue spoken before.

THRA. Marie sir at this daie one man thinkes three Acres too muche for hym: but not too trouble your taske, I praye you goe forward with the Housebandrie of your Vines.

MARIVS. The orderyng of the Vine bearyng Vines, as the sortes of Vines are sondrie, neither can thei bee contained in certaine numbers, for there is as many sortes, as there is of ground. *Homer* giueth the cheefest praise to the wine of *Maronia*, and *Pramnum*, *Virgill* moste commendeth *Rhenish* wine: others the wine of *Aminia*, *Lamentana*, *Candy*, and *Corsega*, but I meane to speake of those that are commonly in our daies. In *Italie* at this daie thei make moste account of wine of *Corsega*, *Romani*, and *Mesina*. In *Spaine* the cheefest esteeme wine of *S. Martine*, of *Rebodari*, and *Giberaltier*. In *France* the greatest praise is giuen to the wine of *Orleans*, *Anjou*, and *Grener*, *Germanie*

The second booke entreatyng

Germanie began but of late to meddle with plantyng of Vines, for *Varro* writeth, that the Frenchmen, and the Germaines had in his tyme bothe Vines, and Oliues: but at this daie the *Rhine*, the *Necker*, the *Mene*, *Mosel*, and *Danow*, maie compare with any Countries, for goodnesse of their Vines.

THRA. I see that the Vines are diuersely dressed otherwise in *Italie*, then in *Fraunce*, and otherwise in *Fraunce*, then in *Germanie*, euery Countrey vsyng his seuerall fashion.

MARIVS. True: for as *Plinie*, after *Columella*, teacheth, the Vine maie bee planted fūe sowerie waies: For either his branches are suffered to runne in safetie vpon the ground, or els without any staie growe vpright, or hauyng a staie or a proppes sette for them, thei climbe vp by it, or els runne vp by a couple of suche proppes, called of *Lany* a yoke, or els sustained with former of those pokes, whiche of the resemblance that thei haue with the hollowe gutters of a house, are saied to bee guttered: Others againe suffered to runne vppon frames like Arbers, scrupng to sitte vnder, and are called Arber Vines: Others runne vp by the walles of houses. Doreouer, the poked Vines, called in Greeke *Επιευμεραι*, are tied together, and ioyned with three or fower proppes, as if thei were poked: some dooe let them runne vppon trees, as commonly in *Lumbardy* thei are suffered to climbe vppon Elmes, Willowes, and Ashes, where thei greatly prosper: neither doe thei like all manner of Trees, for thei haue the Nutte Tree, the Baye, the Radishe, and the Coll: as againe thei loue the Poplar, the Elme, the Willowe, the Figge, and the Oliue Tree. The Vines that are poked, or staied vp with proppes, receiue moze aire, and beare their fruite the higher, and ripe the better, but aske moze trouble in the lookyng to: and these are so ordered, that thei maie be plowed, whereby thei are the moze fruitful, because thei maie the oftner, and with the lesse charge be tilled. The Vines that creepe vpon the ground, make muche wine, but not (as *Columella* saith) so good.

THRA. Now to your orderpyng of them.

MARIVS. Firste, I will speake of the ground, and of the diggyng of it, and after of the plantyng, and cuttyng of the. And firste you must take for a speciall noce, that euery Vine will not

Trees which
be fiendes or
foes to the
Vine.

The ordering
of Vines.

note

not

not agree with euery place, nor peeple his Vine in like good-
neſſe, of ſuche force is the qualitie of the aire, neither will all kind
of ground ſerue: For *Columella* dooeth counſaile to ſette the
Vine in a wilde ground, rather then where Coyne or Buſhes
haue growne: For as for olde Vineyardes, it is moſte certaine,
thei are the wooſte places of all other to ſette newe in, becauſe
the ground is Watred, and as it were Wetted with the remai-
nes of the olde Rootes: Neither hath it loſt the payſon of the
rotten and olde ſtinkynge Rootes, where with the ſoile (glutted
as it were with Venime) is benommed. And therefore the wilde
and vntilled ground is cheefeſt to bee choſen, whiche though it
bee ouer growne with Shrubbes and Trees, maie yet eaſily be
ridde. If ſuche wilde ground bee not to bee had, the beſte is the
plaine champion lande without Trees: if neither ſuche a ground,
then the light and thinnie Buſhie ground, or Olive ground.
The laſte and wooſte (as I ſaid) is the olde rotten Vineyard,
whiche if neceſſitie compell you to take, you muſt firſt ridde the
grounde of all the olde rotten Rootes, and then couer it eicher
with olde dooing, or with the netweſt of any other kinde of man-
nering: the Rootes beeing thus digged vp, muſt bee laied vp
together, and burned. After muſt the grounde bee conſidered,
whether it bee mellowe and gentle: It is thought to bee good,
that is ſomethyng greetie and grauelly, and full of ſmall ſpe-
cles, ſo that it bee mingled with fatte mould withall, whiche if
it bee not, is vtterly diſallowed.

What ground
is beſt for
the Vine.

Dame Ceres ioyes in beanie ground, and Bacchus in the light.
You ſhall perceiue it to bee maſſie and thicke, if beeing digged,
and caſte into the hole againe, it riſeth ouer: if it ſcarſely fill the
hole, it is a ſigne that it is light and thinnie. The Flinte by the
generall conſent of Houſebandmen, is counted a freende to the
Vine, ſpeciallic where it is well couered with good mould: for
beeing colde and a keeper of moiſture, it ſuffereth not the Roo-
tes to bee ſkalded with the heate of Sommer: So muche, that
Columella doeth will men to laie certaine ſtones about the ſides
of the Vinetrees, ſo that thei exceede not the weight of five
pounde a peece: whiche as *Virgil* hath noted, keepes awaie the
water in Winter, and the heate in Sommer.

Harle

The second booke entreating

Harle in the thristie stone, or therein throwe the nastie shelles. So doe wee see the bankes of the Rhine beeping full of these stones, too yeele an excellent good wine: but the stones that lye aboue ground, are to bee caste awaie: for in the Sommer beeping heated with the Sunne, thei burne the Vine, and in the Winter thei hurte them with their colde, contrarie to those that lye in the bottome. But the beste of all is the foote of an hill, whiche receiveth the falling mould from the toppe: or the valle, that with ouerflowing of Rivers hath been made ritche. Neither is Chalkie ground to bee refused, though the Chalke of it self that Potters vse, is hurtfull to the Vine. The hongrie Sandie ground, the salte, bitter, and thristie ground, is not meete for the Vine: yet the Blacke and Reddishe Sande, medled with some moiste earth, is of some allowed well yenough. Moreover, neither ground too hotte, or too colde, too drie, nor too moiste, too slender, nor too stiffe, that will not suffer the raine to strike, as meete is to bee used for Vines, for it will easily gape and open, whereby the Sunne coming in at the craiuesses, dooeth burne the rootes: That againe whiche is ouer thime, lettung in as it were by deemes by Raine, the Sunne, and the Winde, dooeth drie by the moisture of the rootes: The thicke and stiffe ground is hardly to bee laboured, the fatte ground subiecte to too much racknesse, the leane ground to barrennesse: wherefore there must bee an euen temperature amongst these extremities, as is required in our bodies, whose healthe is preserued by the equall medley of heate and colde, drie and moisture, fullnesse and emptinesse, or thicknesse and thinnesse: Neither yet is this temperature in ground for Vines so iustly to bee euened, but that there is required a more enclinyng to the one parte, as that the earth bee more hotte then colde, more drie then moiste, more subtil then grosse, specially if the state of the Heauens agree: againe, what quarter whereof the Vine shoulde ought to lye, it is an old controuersie, some like best the rising of the Sunne, some the Weste, some the North, Virgill misliketh the Weste: others againe thinke the best lying to bee vpon the South. But in generall it is thought beste in colde Countries, to haue it lye toward the South, in warme countries vpon the East, in hotte burning

What quarter
of the heauen
the Vine must
lye agaynst.

burnyng Countreys, as *Egypt*, and *Barbary*, vpon the North. *Plinie* would haue the Vine himselſe ſtande towards the North, and his ſpyng, or ſhootes, towards the South. A fitte ground, and well lyng, beeyng found out, muſt bee diligently digged, dounge, and weeded: all vnprofitable weedes muſt bee pulled vp, and thowen away, leſt they ſhould ſpyng agayne, and either corrupt the young plantes, or hinder the labourer.

T H R A. Before you come to trenching, I would gladly heare, in what ſort you plant your Vine, and what ſeaſon is fitteſt for it.

M A R I V S. I will firſt ſpeake of the ſeaſon, and afterwards of the planting. The Vine is planted accordyng to *Virgils* Rule, in the fall of the leafe, but better in the ſpyng, if the weather be rayny, or colde, or the ground be fatte, champion, or a warrishe valley: and beſt in the fall of the leafe, if the weather be drye and warme, the ground dry and light, a barrayne, or a rugged hill. The tyme of planting, in the ſpyng (as *Columella* ſayth) endureth fourtie dayes, from the Ides of February, vntill the *Aequinoctial*: and in the fall of the leafe, from the Ides of October, to the Kalendes of December. *Cassian* in *Conſtantine* beyng taught by experience, wiſs in warrie groundes you ſhould rather plant in *Autumne*, when the leaues are fallen, and the plantes after the Untage, deliuered of the burden of their cluſters, ſound and ſtrong, before they be nipped with the froſtes, for then they beſt agree with the ground, nature applyng her ſelfe wholly to the nouryſhing of the roote. The tyme of graffing *Columella* ſayth, is of ſome extended from the fyrſt of Nouember, to the fyrſt of June, till which tyme the ſhoote or graffe may be preſerued: but it is not well liked of him, who rather woulde haue it to be doone in warmer weather, when Winter is paſte, when both budde and rynde is naturally mooued, and ſafe from colde, that might annoy either the Graffe, or the Stocke: yet he graunteth (when haſt requireth) it may be done in the fall of the leafe, when as the temperature of the ayre, is not muche vnlike to the ſpyng: for whiche purpoſe, you muſt chooſe a warme day, and no wind ſtirring. The graffe muſt be round and ſound, not full of pith, but full of budde, and thicke of ioyntes, the tenant

The time for
planting of
Vines.

Graffing of
Vines.

What graffes
to be choſen.

L. j.

whereof

The second Booke entreating

whereof must not exceede three inches, and smoothe, and euen cut: the stocke and the cleft must bee well closed with Clay and Hossie. Those that growe toward the South, must be marked, whiche *Virgil* obseruing sayth.

*But on the barke, they also note the quarter of the skie,
The order how it stood, and grew, and where the South dyd lye.*

The like is to bee doone with all other Trees. Of plantyng of Vines, there is two waies, the one of the Roote, the other of the branche, or spraye: the roote is counted a great deale better then the branche or set, by reason of the forwardnesse, and vantage that it hath, in that it hath already taken roote. The roote is set in stiffe ground, well digged and laboured, in a trench of three foote, the set or spraye, in a gentle and mellowe ground: in drye ground, it is neither good to set the Roote, nor the Branche in a drye season: it is beste to plant in the fall of the leafe in a hotte season, and in a colde and moyst, in the spring: in much wet, you must set them thinner, in great dryeth, thicker: in what sort you shall make a stoye Garden for Vines, *Palladius* teacheth you. The set requireth a time to roote, and being remoued, will beare the better fruite. The rootes doo beare fruite the second yeere, or sooner: the settes, or branches, sharpe in the thirde or fourth yeere, though in some places sooner. *Didymus* in *Constantine*, teacheth an easie and a redie waie of plantyng the Quicksette, whiche is, to take of a strong and tennye yeere Vine, the longest and fairest branch, that groweth lowest, a foote from the ground, and laying it along in a Trench of a foote deapth, to couer it with earth the space of foure ioyntes, so that the remayne in the toppe, exceede not two or three ioyntes: and if the branche bee so long, as it will serue for two burninges, you may make there of two rootes. You must not suffer two rootes to runne by bypon one stay, but allowe euery roote his supporter. The Branches or settes that you meane to plant, you must cut from a be-
rie fruitefull and flourishing Vine, that hath bozne ripe and perfect good fruite, full of ioyntes, and not any wayes tainted, but whole and sounde. Of suche you must choose your settes, and not

Quicksette:

not of young Clines, that are weake and feeble, but suche as are in their cheif state. Moreover, you must geather your sette, not of the highest, nor the lowest, but from the middest of the Cline: the sette must be round, smoth, full of knottes and ioyntes, and many littell burgeons. As soone as you haue cut it of, looke that you sette it: for better dooth it agree with the ground, and sooner growe. If you are driuen to keepe them, burie them in the ground either loose, or loosely bound: and if the tyme bee long that you meane to keepe them, you muste laye them in empye Barrells, strawing earth vnder them, and vpon them, that the earth may laye round about them: and the barrell you must stop closely with Claye, that there enter neither winde nor ayre, so shall you preserve them two monethes in their goodnesse. Such as are ouer drie, you must lay them in water. xiiij. houres afore you sette them, and you must set two settes togeather, that though the one sayle, the other may take: and if they both grow, you may take vp the lesser of them: you must not make a medley of sundry sortes, specially white and blacke togeather: but as Columella sayth, must sort them seuerally. You must beware, that the settes haue not put out their springes, and that you sette not a withered sette. Constantine would haue the sette somethyng crooked, affirmyng that it will the sooner take roote. You must lay about them thre or foure stones, and then rayse the earth, that it may equally with the doeing bee troden downe: for the stones keepeth the earth syne, and as I sayde before, cooleth the Roote. Both the endes of the sette you must annoynt with Dre doung, for the killyng of the woormes: as for the length, if it bee full of ioyntes, it may be the shorter, if it haue fewe ioyntes, you must make it the longer, and yet not exceeding a foote in length, nor a shaftman in shortnesse, the one for being burnt with ouer drynesse in Sommer, the other leaste being sette to deepe, it bee with greate hardnesse taken vp, but this is for the leuell ground: for vpon Hills, where the earth still falleth, you may haue them a foote and a hande breadth in length. Florentine would not haue the trenche lesse then foure foote in deapth: for being sette shallowe, they sooner decay, both for the want of sustenance, and great heate of the Summe, which

The length
of the settes.

The second Booke entreatynge

is thought to pearse foure foote into the ground: though some there be that thinke thre foots sufficient for the Plante. The Trenches for Vines, *Virgil* would not haue verie deepe: but deeper a greate deale for trees. Such Vines as you meane shall runne vpon trees, you must plant thre cubites distant from the tree: after wardes, when they be well growen, and neede to bee ioyned with the Tree (whiche you shall perceiue by his thickenesse) you shall lay it downe in length, and burie it, till it come within a foote of the Tree, suffering the remaine to goe at libertie, nipping of all the buddes with your naylor, except one or two, that it may the better prosper, whiche when it is growen vp, you must ioine by little and little to the tree, that it may rest vpon it: whiche part of the tree must be diligently pruned, and the springes and scapes, that growe out of the roote, must according to *Florentinus*, be cut cleane away. The trees, as much as may bee, must bee forced to the East and the West, and both the Tree and the Vine, must haue the Earth well digged, and douned about them. In ritche ground, you may suffer the trees to growe in heighth, but in barrayne ground, they must bee polled at seuen or eight foote, least all the substance of the earth, bee soked vp of the Tree. After your planting, you must digge the ground euerie moneth, and weede it, specially from the firste of Marche, till the first of October: euerie thirtie daie you muste digge about the young plantes, and plucke vp the weedes, specially the grasse, whiche except it be cleane plucked vp and caste awaie, though it bee neuer so well couered, will spring agayne, and so burne the plantes, as they will make them both foale, and withered: the oftner you digge them, the more good you dooe them. When the Grape beegins to alter, you must in hande with your third digging, and when it is ripe, before noone when it wareth hotte, and after noone when the heate decreaseth, you must digge it, and rase the duste, whiche dooing, defendeth the Grape both from the Sunne and the Mist. According to *Virgil* mind, the Vine must be digged and weeded euerie Moneth: some would haue them digged all the Sommer long, after euerie deawe: others againe will not haue them digged, as long as they budde, or burgen, for hurtynge the springes, sayng, that

it

The ordning
of Vines af-
ter their plan-
tyng.
Of digging
and doun-
ing of Vines.

it is penough to digge them thysse in the yere, from the ente-
ring of the Sunne into *Aries*, till the rising of the seven starres,
and the Dogge. Some againe would haue it done from the
vintage before Winter, and from the Ides of Aprill before it
take, and then agayne before it flowe, and likewise before the
burning houres of the day: in some places when they haue dig-
ged them, they doo not straight waies couer them, but suffer the
trenches to lye open all the Winter, in wette and raynie places
they couer them sooner, closing by the rootes with earth, and
stopping al the passages of the water. Some make the trenches
very deepe, and some not passing a foote deepe: and when they
haue done, they couer them aloft with Dre dounge, Sheepes
dounge, or Hogges dounge, or of other cattell: Digions dounge
is the hottest, and suche as causeth the Vine fastest to growe,
but maketh the woorser wine. The dounge must not be layd close
to the Vine, but a little distant from it, whereby the rootes that
spreade abroade, may haue some helpe of it, and the dounge must
not touche the Rootes, for breakyng of them: if there bee no
dounge at hande, the stalkes of Beanes, and other Pulse, will
well serue the turne, which both defendeth the Vine from frost
and cold, and keepes them likewise from noysome wormes: the
kernelles, and the stalkes of the Grapes, doo likewise supplie
the want of dounge, but the best of all, is olde stale Urine. The
plantes of a yere, or two yere old, and so forth till five yeres,
must bee discretely digged and dounge, accordyng to their
state: in sandie ground, the beste dounge is of Sheepe and
Goates, and in suche sort you must digge the ground, that the
earth that lyeth highest, be cast to the bottome, and that whiche
was at the bottome, bee layde aloft: so shall that that was drie
by the moysture within, bee helped, and that which was moyst
and stiffe by the heate aboue, be loosened. You must also see that
there be no holes nor pittes in the Vineyard, but that it lye euen.
When you haue thus digged it, and that the Vines haue taken
roote the first yere, the rootes that growe aboue, must bee cut
away with a sharpe knife: for the Vine, if it be suffered to roote
euery way, it hindereth the deepe downe growing of the roote.
The Vines that are now of two yeres growth, we must digge

What dounge
is best for Vi-
nes.

*Digious dounge
best to raise
vine to grow
fast:*

Where the
dounge must
be laide,
a good note

Pisse the best
dounge, for vines
and apple trees
fo: Battista Por

The order of
digging or
stirring the
ground.

The second Booke entreating

Dressing of
Vines.

and trenche about two foote deepe, and thre foote broade, according to the rule of *Socion*. Of those Vines that climbe vpon trees, you must likewise cut of the sprigges that runne among the rootes of the tree, least the small roote tangled with the greater, be strangled: and therefore you must leaue some little space betwixt the Vine & the tree. Often digging causeth great fruitfulnessse: good heede must be taken, that the plantes be not hurt in the digging: also it must be digged before his flourishing, or shooting out of his leaues, for as immediately therewithall he beginneth to thrust out his fruite. So hee that diggeth after the commynge forth thereof, looseth muche fruite with the violent shaking, and therefore must digge the tyncler. Cutting and dressing of the rootes, you must begin in hand with at the Ides of October: so that they may bee trimmed and dispatched afore Winter. After Winter, digge about the rootes that you haue dressed: and before the same enter the *Aequinoctium*, leuell the rootes that you haue trimmed. After the Ides of Aprill, rase vp the earth about your Vine: in Sommer let the ground be oftentimes harrowed. After the Ides of October (as I haue sayde) before the colde come in, you must dresse the Rootes of your Vines, whiche labour layeth upon the Sommer springes, whiche the good husband cutteth away with his Knife: for if you suffer them to growe, the rootes that growe doune will perishe, and it happeneth that the rootes spreade all aboue, whiche will be subiect both to colde and heate: and therefore what so euer is within a foote and a halfe, is to be cutte of, but so, as you hurte not the principall. You must make this ryddance of the Rootes at euerie fall of the leafe, for the fyrst fve yeres, till the Vine be full growen, after, you must dresse them euery fourth yere: suche Vines as are ioyued with trees for the vnhandsomenesse, can not bee thus handled. Vines and Trees, the sooner they rootes be thus dressed, the stronger and weyghtier they will be: but suche as growe vpon the sides of hilles, must so be dressed, as the vpper rootes neare to the stocke maye spreade largely, and vnderneath towardes the foote of the hill, the earth must be banked, to keepe the water and the mould the better. The olde Vine must not haue his roote medled withall for wytheryng,

not be plowed, for breaking of them, but the earth a little loosed with a Mattocke, and when you have thus dressed the roote, laye downe about it. After this ridding of the Rootes, then followeth prouing, or cutting, whereby the whole Vine is brought to one twigge, and that also cut within twoo ioyntes of the earth: whiche cutting must not be in the ioynt, but betwixt the ioyntes with a slope cutte, for auoyding the water: neither must the cut be one that side that the budde comes out of, but on the contrary, least with his bleeding he kill the budde. *Columella* appoynteth two seasons for the cutting of Vines, the spring, and the fall of the leafe, iudging in colde countreys, the cutting in the spring to be the beste, and in hotte Countreys where the Winters bee milde, the fall of the leafe: at which tyme both trees and plants, by the diuine and euerlastyng appoyntment of G D D, yeld by their fruite, and their leafe. Yet must not your settes bee too nearely cut, except they be very feeble: but the firste yeere they be set, they must be holpen with often digging, and pulling of the leaues moonthly whyle they beare, that they may growe the better. *Pamphilus* in *Constantine* declareth the time of cutting, or prouing, to begin in February, or March, from the fiftieth of Februarie, tll the twentieth of Marche: some (he sayth) thought good to cutte them immediatly after the greatheryng of the Grapes, least by bleedynge in the spring, they loose their sustentance: though they be cut in the fall of the leafe, it springeth the sooner in the spring, and if the colde of frost happen to come, it is spoyled. Therefore in colde Countreys, it were better to proue it a little, then to cut it thoroughly, that is, to suffer the principall springes, and branches to growe. Agayne, it is verie necessarie to cut them in the spring: the cuttes must be made with a very sharpe knife: that they may bee smoothe, and that the water may not stand in them, to the engendring of wormes and corruptyng of the Vine: you must cut them rounde, so will the cut bee sooner growen out agayne: but *Plinie* would haue them slope wyle, for the better auoyding of the Water. The branches that be broade, olde, crooked, or wythen, cut awaye, and set young and better in their place. You must make an ende of your cutting with as much speede as you may, from the Ides

The second Booke entreatynge

of December, till the Ides of Januarie: you muste not touche your Vines with a knife, for *Columella* witnesseth, that Vines in Winter may not be cut. In cuttynge, remember well to cut it betwixt two ioyntes, for if you cut it in the ioynt, you spill it: let the cut be alwaies downewarde, so shall it be safe both from sunne, and weather. You must not cutte them very early, but when the sunne hath drunke by the frost, or the deawe, and warmed the branche: the springes of the lattes the fyrst peece, muste be cut with good discretion, nor suffered to growe to ranke, nor cut too neare, but makynge the olde set to suffer a spring or twoo to growe out. Next vnto cuttynge, foloweth the proppynge, or supportynge of the Vine: and it is best for the young and tender Vine, not to bee steyed by with any strong stay, but with some small thing at the first, and while it is young, it must be deynately tyed to the stay, with small twiggess of Willowe, Elm, Broome, Rushes, or Strawe: this latter binding, is thought to be best, for the twiggess when they waxe drie, doo pearce and hurt the rynde. There is an hearbe, whiche because of his aptnesse for tyng of Vines, the *Sicyllians* call *αμπελοεισμον*. The best stapes for Vines as *Plinie* sayth, are made of Willowe, Oke, Reede, Juniper, Cypressse, and Elow, And in an other place, he preferreth the Chestnut for this purpose, aboue all the rest. The beste for the Vine, is the Reede, whiche well endureth fyue peeres: geldynge of the leaues, and cuttynge the Vine, is almost in one maner. The geldynge of the leaues, or branches, must bee done twise a peere, to the ende that the superfluous springes and leaues may be plucked of. The fyrst (as *Plinie* wyrteth) must be done within ten dayes after the Ides of May, before the Vine begynne to floure: for about the tenth of June, both the Vine, and Wheate, the two noble fruites, doe floure. Of the second tyme, the opinions are sundry, for some suppose it beste to plucke of the leaues and branches, as soone as it hath left flouwing: others, when the fruite is full ripe. The superfluous springes being young and tender, are to be taken awaye. that the Vine may be more at libertie, and through blowen with the Winde. This geldynge, or cuttynge awaye the superfluous branches and leaues, is as needefull as the propping: for both

the

Propping of
Vines.

Gelding, or
plucking of
of leaues.

the fruite dooth prosper the better, and the propping the nexte peere will be the handsomer, and the Vine will be the lesse full of galles: for that whiche is cut being greene and tender, dooth the sooner and the sounder recover hym self, and the Grape ripeth the better. Tenne dayes before the Vine beginnes to flowre, see that you gelde it in this sort: cut of all the superfluous branches, both one the toppe, and on the sides, but meddle not where the clusters growe, strike of the toppes of the branches for growing to ranke: suche Grapes as growe towards the Southe, or the West, leaue them their branches to defend them from the heate of the Sunne: cut awaye most from the young Vine, for ouerburdnyng hym. After the heate of the Sunne beginneth to fade, away with the leaues, for hindering the Grapes of their ryping: and while the Grape is a flowring, busie your selfe with digging about it. Suche Vines as with thicknesse of their leaues corrupteth their fruite, are to be rydde of their superfluous branches and leaues, a moneth before the geathering of your Grapes, that the winde may blowe the better throughe them: but the leaues that growe aloft in the berie toppe, must not bee medled with, but left as a defence, and shadowe against the heate of the Sunne: but if so be the ende of Sommer be geuen to much ranke, and that the Grapes swell in greatnesse, then hardly plucke of the leaues from the top also.

THRA. You haue tolde vs of a greate deale of labour about Vines.

MARIVS. The Vine keeper must often goe aboute his Vines, and set vp his proppes, and make euen his pokes.

THRA. One thing, I praye you, let me heare more, the signes and tokens of the ripenesse: for as I vnderstand, we may not be to busie in geathering them to soone, nor vse any lingring after they be ripe, without greate harme.

MARIVS. You say true: for beyng geathered before they bee ripe, they will make but small wine, and not durable. And agayne, if you suffer them to long, you shall noe onely hurt the Vine with the ouerlong bearing of her burden, but also if hayle or frost happē to come, you put your vine in great danger. *Democritus* writeth, that the Grape endureth in his ripenesse

The second Booke entreating

not about sixe dayes, and therefore the iudgement of his ripenessse, is not alonely to be geuen vppon the sight, but vppon his taste, though *Columella* thinketh there can be no certaine iudgement giuen of the taste. But if the stones doo change their colour, and be no longer greene, but be almost blacke, it is a signe the Grape is ripe. Some againe doo presse the Grape betwixt their fingers, and if they see the stone to slippe out smoothe, without any thing cleauing to it, they thinke them meete to be geathered, but if they come out with some part of the Grape cleauing to them, they count them not to be ripe. Others moue them in this sort: out of a very thicke cluster, they take a Grape, and as they behold the cluster well, wherein they see no change, they take it for a token of ripenessse. You must geather your Grapes, the Mone beyng in Cancer, Leo, Libra, Scorpius, Capricorne, or Aquari, and vnderneath the earth,

THRA. Is there no way to make the Grape ripe speedely?

Prima veteri

MARIVS. *Plinie* teacheth, to rubbe ouer the rootes with tart Vinegar, and very olde wyne, and thus to bee often diggen, and couered.

THRA. What order haue you for preseruing of your Grapes; when they be geathered?

MARIVS. Some keepe them hanged vp in the roofof Chambers, and some in earthen pottes close couered with woden vessels. *Paladius* sheweth a way how to keepe them vpon the Vine, till the Spring.

THRA. I praye you proceede with the other fruite trees of your Orchardes.

The Olyue.

MARIVS. Among other fruite trees next vnto the Vine (as *Columella* sayth) the cheefe place is giuen to the Olyue, in Latine *Olea* in Greeke *ελαια*. Of all other plantes, it requireth least trauaile and charges, where as the Vine requireth most: and though it beare not euery yeere, but euery other yeere, yet is he to be hoine withall, because he asketh neyther cost, nor labour: and if you bestowe any vppon hym, he recompenseth it thowly, with the abundance of his fruite. And since there is so greate profite and commoditie in this tree, and that the uses of it are so many, and so needefull, it is good rea-

son

son to bee diligent and carefull about it: he loueth a ground neyther to hye, nor to lowe, but rather the syde of a hyll, suche as is the most part of Italy and Spayne: for in suche ground, the extreme heate of the sunne, is somethyng mollified with the colde blastes of the winde: for in Olyue trees (as *Plinie* sayth) the soyle, and the clime, is of greate importance: it delighteth in a warme, and a drye ayre, and therefore in *Barbary*, *Sicily*, *Andalusia*, sundry partes of Italy, specially *Campania*, it prospereth woonderfully: it liketh not too great heate, nor too muche colde. And therefore in hotte countreys, it ioyneth vpon the North side of the Hilles, and in colde, vppon the South side. It is thought, that if it stande aboue threescore Oyles from the Sea, that it eyther dyeth, or prooeth not fruitfull. The best ground is the grauell ground, hauing aloft a little Chalke mingled with sande: it is also good ground where the sand, or grauell, is mixed with riche mould: pea the stiffe ground, if it bee riche and liuely, dooth very well agree with this tree. Chalkie ground is utterly to be refused, and watry and marlye ground, woorst of all. The lyke is a barrayne sande, and a hungrie sand: but you may set it well in coyne ground, where either the *Willow* or the *Waltheim* hath growen: but betwixt the Dike and it, there is greate hatred, for if the Dike groweth neare, it flyeth away, and shrinketh towardes the earth: and though you cut downe the Dike, yet the very Rootes poysoneth and killeth the poore Olyue. The like some asseyme of the Trees called *Cornus*, and *Esculus*: for where they be pulled vp, if you set the Olyue, hee dyeth: so dooth it (as *Plinie* sayth) if it chaunce to be bruised of the Goate. On the other side, betwixt the Olyue and the Vine, there is greate freendship and loue: and it is sayde, that if you graffe the Olyue vpon the Vine, it will beare a fruite that shalbe halfe Grape, and halfe Olyue, called *Vuolen*, in Greeke *ἑλαιοάφυλος*, and Olyue grape. There are sundry wayes of plantyng of Olyues: some take the biggest branches from the trees, and saweing of the youngest plantes of two cubites in length, they set them orderly in the ground: some set the whole Tree together. Some agayne cuttyng of the toppes, and all the branches, set the stocke, about the ryng of the starre.

The second Booke entreating

INTNS. Many make them Impe Gardens in good ground and mellowe, suche as is commonly the blacke mould: herein they set the young branches, the lowest, and the sayrest, two or thre inches in thickeesse, and very fertill, whiche they geather not from the body of the tree, but from the newest and latest bowes. These they cut into pretty settes of a foote and a halfe in length, takyng good heede that they hurt not the rynde, and paring the endes very smoothe with a sharpe knife, and markyng them with redde Waxe, that they may knowe whiche way they stode afore, and so settynge the lowest parte into the ground, and the highest towards the Heauen, they put them in the ground, and so they growe the faster, and beare the better: for if you should set them with the lower ende vpyward, they would either hardly growe, and proue vnfruitfull: and therefore they haue a regard of the settynge of them. You must beside, before you set them, rubbe ouer both the toppe and the foote, with dung mingled with Ashes, and so set them deepe in the ground, coueryng them foure fingers thicke with rotten mould. You may choose whether you will set them all vnder the ground, or sette some part within the ground, and suffer the rest to appeare aboue the ground: those that be set all within the ground, neede not to be marked, but suche as shall stand with one parte aboue the ground. *Didymus* would haue them so set, as they may appeare foure fingers aboue the ground, and then to make a little trench for the receauyng of the water: and this maner of planting with the bowes, is of *Didymus* beste liked. Where you meane to plant, you must purge the ground of all other plantes, bushes, and weedes: and the Trenches must so bee made, as with the winde, the sunne, and rayne, it may be mellowed & made crumbling, that the plantes may the sooner take roote. If your busynesse requyre hast, you must a moneth or two before, burne in the trenches either stiches, or reede, or such thinges as will easily take fyre: and this you must doe diuers dayes togeather. Your trenches must be thre cubites, or there aboute in deapth, & fouertie cubites a sunder, whereby the trees may haue ayre penough: y first yere, second, & the third, the earth must be trimmed with oft raking: the first two yeres you must not meddle with propping: the

the thirde yere, you must leaue vpon euerie one a couple of branches, and often rake your Impe Garden: the fourth yere, you shall of the two branches, cut away the weaker: beeing thus ordered, in the fift yere they will ~~bee~~ meete to be remooued: the stocke that is as bigge as a mans Arme, is best to bee remooued: let it stand but a little aboue the grounde, so shall it prosper the better. Before you remoue it, marke the part that stood South with a peece of Oker, that you may set it in like maner agayne. You must firste digge the trenched grounde with Hartokes, and after turne in stone plowed earth, and sow it with Barley: if there be any water standing in them, you must let it out, and cast in a few small stones, and so setting your Settes, cast in a little dung. After the tenth of Iune, when the ground gapes with the heate of the Sunne, you must take heede, that the sunne pearce not through the cleftes to the Roote. From the entring of the Sunne into *Libra*, you must ridde the Rootes of all superfluous springes: and if the tree growe vpon the edge of a Hill, you must with little gutters draw away the muddy water. The dung must be cast on at the fall of the leafe, that beeyng mingled in Winter with the mould, it may keepe the Rootes of the trees warm. The Mother of oyle must be powred vpon the great ones, & the mosse must be cut of with an iron instrument, or els it will yeld you no fruite. Also after certayne yeres, you muste cut and loppe your Oliue trees, for it is an olde prouerbe: that who so ploweth his Oliue Garden, craueth fruite: who dungeth it, motueth fruite: who cutteth the trees, forceth fruite. In the Oliue tree, you shall sometime haue one branche more gallant then his fellows, whiche if you cut not away, you discourage all the reste. The Oliue is also grafted in the wilde Oliue, specially ketwixt the rinde and the woodde, and by emplastring: others graffe it in the roote, and when it hath taken, they pull vp a partell of the Roote withall, and remooue it as they doe other plantes. Those Oliues that haue the thickest barks, are grafted in the barked. The tyme of grafting them, is from the entring of the Sunne into *Aries*, and with some from the xxij. of May, till the firste of Iune. The tyme of gathering of Oliues, is when the greater part of halfe the fruite waxeth blacke,

and

The second Booke entreatyng

and in fayre weather: the riper the Oliue is, the fatter will be the Dyle. In geathering of Oliues, there is more cunning in making oyle, then in making wine: the lesser Oliues serue for oyle, the greater for meate. There is sundry sortes of oyle made of an Oliue, the first of all is ratwe, and pleasantest in taste: the first streame that comes from the Presse is beste, and so in order. The best Dyle is about *Venafri* in *Italy*, and *Licina* in *Spaine*: The next in goodnesse in *Prouence*, except in the fruitfull partes of *Barbary*. The Oliues that you may come by with your handes, you must either vpon the ground, or with Ladders geather, and not beate them downe: for those that are beaten downe doo wyther, and yelde not so muche Dyle as the other: and better is the Oliue that is geathered with the bare hande, then with globes: there is an olde lawe for Oliues, byrle not the Oliue, nor beate hym. Those that passe the reache of the hand, must be rather beaten downe with Reedes then Dowles: the oyle is encreased fro the rpyng of the Bearward, to the sixteenth of the Kalendes of October: after, the stone & the meate doo growe. Of Dyle, some parte serueth for meate, and other for the sowpling of the body: and therefore as *Varro* sayth, it accompanieth his maister, not onely to the Bathe, but also to the Feelde: or where so euer he goeth. The Oliue wherof you make your Dyle, must bee taken from the ground: and if it be foule, must be washed: for the dryng, three dayes is sufficient: if it bee frosty weather, they must be pressed the fourth daye: euery firste heape must bee put in earthen pottes, and Dyle vessels, where with hard and rough stones they are grinded. The geathered Oliue, if it lye to long in heapes, putrieth by reason of beate, and makes vnfauiery Dyle. Milles are more handsome for the making of oyle, then the Trough and the Foote: for the Mylles may be handled with greete discretion: the whole stone may bee rapped or lee downe, accordyng to the quantitie of the Berry, lest the stone whiche would marre the taste of the oyle, should be broken. The presses chiefly, and the oyle houses ought to be warme, for the speedier running of the oyle: whiche with colde would make the longer stay. And such heate and warmth is so needefull, you must prouide that your house lye towarde the

Sunne,

Summe: so shall you neede neither flame nor fyre, whiche with smoke or soote, may corrupt the taste of your Dyle. The lawes and order of geathering, and bestowing of Oliues, hath *Cato* described: the maner of preserving them, is declared by *Columella*, whiche were too muche for mee to speake at this tyme.

THRA. Goe on then, and let vs heare what you can say of Apple trees: whose vse is more commonly knowne vnto vs.

MARIVS. The Apple, called in Latine *Pomum*, in Greeke *μελον*. There are that put this difference betwixt the Apple and the Nut, that what so euer fruit is to bee eaten soft without, and hard within is an Apple, and the contrarie a Nut. *Pomum* generally spoken, is to bee vnderstoode of all that the Greekes comprehended in the word *Οπωρα*, as Peaches, Quinces, and Peares, wherunto the Lawyer agreeth: but in this place I speake of Apples, according to the common phrase: as for Quinces, Pomegranates, & Turky Plomes, I will speake of in their due places. There are suche sundrie sortes of Apples, differing both in shape and saour, as are scarcely to bee numbered. In the olde tyme the cheefest Apples were *Septians*, very greate and round, *Martians*, *Claudians*, *Marians*, and *Appians*, so called of their first founders: some againe tooke their names of their Countreys, as *Camerians*, and *Grecians*: so others of their colours, as redde, sanguine, silken, and golden. We haue at this day that are cheefe in vize the *Wippin*, the *Romet*, the *Pomeroyal*, the *Harligold*, with a great number of others, that were too long to speake of. There is but one maner of plantyng and graffing of them all, sauing that the Peache, the Lemon, the Abrecot, the Quince, and the Cytron, which are all of *Dioscorides* accounted in the number of Apples, require a little more diligent care, as shall be sayde hereafter, then the others, for they are all both planted and graffed: the maner of an *Impe Garden* *Cato* describeth. Apple trees are set either in Februarie, or in March: or if the countrey be hotte and drie, in October and Nouember. But all kinde of Apples doo better moouer by graffing, and inoculation, or imbudding, as I sayd before, about March or April, or at what tyme so euer the sauyt be in the rind. They are also graffed by implastring, about the tenth of Iune: though

Apples.

e apples y ar
at this day in
estimation.

Some of best
apple set
in Februar
in hotte groun
in october and
November.

The second Booke entreating

though some (as they saye) haue had good successe in dooing it, after the entrance of the Sunne into *Aries*, as I haue sayde before, where I spake of implastring and grafting. The Apple is commonly grafted vpon the Crabbe stocke, or vpon the Bramble, beeyng firste planted, and the yeere after cutte of within a foote of the earth: vpon this stocke you may graffe (as I sayde) the tender young grasses of any Apples. *Palladius* sayth, you may graffe the Apple vpon the *Perry*, the *Watthorne*, *Blome tree*, *Serrisse tree*, *Pearche*, *Plane tree*, *Doplar*, *Willowe*, and *Beare*: but in suche difference of Countreys, we can set downe no certayne order for them all: and therefore as farre as myne owne experience, and the knowledge that I haue learned of others will stretch, I will gladly shewe you. There are that according to the olde order, doo graffe the Apple eyther vpon a wilde *Perry*, or vpon a *Quince*, whereof they haue a most excellent fruite, called of the olde wyters *Melimela*. If you graffe vpon the *Plane Tree*, you shall haue a redde fruite: you may also well graffe your Apple vpon the *Damson tree*, and if you graffe vpon the *Cytron*, you shall haue them beare, as *Diophanes* sayth, Fruite almost all the yeere long. The Apple lo- ueth a fatte, and a good ground, well watered rather by Nature, then by industrie. In mountaine countreys, they must alwayes be set towarde the South: it prospereth well yenough, so it bee somethyng holpen with the Sunne, neither doo they refuse eyther rough, or marishe groundes. A leane and a barrayne soyle bringeth out *Wormes* eaten, and falling fruite: the noysome *Wormes* are destroyed with *Hogges Doung*, mingled with mans *Urine*, and powred vpon the rootes. And if the tree be very full of *Wormes*, being straped downe with a brasse scraper they neuer come againe, if the place whence you scraped them, he rubbed ouer with *Bullockes Doung*: some adde into *Urine* *Goates doung*, and poure vpon the rootes the lees of old wine. The tree that is sicke, or prospereth not, is holpen being watered with *Asse doung*, and water sixe dayes: they must be often watered at the setting of the Sunne, till the Spring bee come out. *Plinie* writeth, that the water wherein *Lupines* hath been sodde powred vpon the Tree, doth the fruite good. They saye, if the tree

Apple trees do
like moiste
groundes.

Against hurt-
full Wormes.

Vrma.

Tree be muche watred with wine, the fruite will be redde. *De bone ruyble*
 thers againe sette vnder their Trees Roles, thinking they cū will fruite.
 to haue their Apples redde. Apple Trees (as I said before)
 must bee set euery sorte by them selues, as Columella biddech,
 lest the small trees be hurt of the greate, because they be not a les
 one growth, nor strength. Beside, you must set them berie thin,
 that they maie haue roome to shoote out their branches: For if
 you sette them thicke, they will neuer beare well, and therefore
 you muste set them fourtie, or at the least thirtie foote a funder;
 the Apple declareth his ripenesse, by the blacknesse of his kernel-
 les. They are gathered after the fourteenth of September, or
 there about, accordyng to their kinde, and not before the spoone
 be seuentene daies old, in faire weather, and in the after noone:
 Those that fall from the Tree, muste bee laied by them selues:
 it is better to pull them, then to shake them, lest they bee byrused
 in their falling. They are kepte in faire loftes, vaultes, or colde
 places, with windowes openyng toward the North, whiche in
 faire weather muste bee sette wide open: and therefore Varro
 would hang all Apple loftes haue their windowes North, that
 they maie receive the North aier: The South windes must bee
 shutte out. The blastes of the North wind, dooeth make them
 wrinkled and rugged: they must bee laied thinne vpon Strawe,
 Chaffe, or Hattes. I had an Apple brought me out of Holland,
 that endured thre yeres: I haue a Tree of them here in this
 Orchard of his colour, called a Greenyng. You must laie eue-
 rie sorte by them selues, lest sonderie sortes lying together, they
 sooner rotte. Some vse to laie them in Rutte leaues, whiche
 bothe giueth them good colour, and good smell. They are also
 kept from rottyng, if they bee laied in Barkie, or Whente. Pal-
 ladus would haue them kept in earthen vessels close stopp'd,
 in Sesternes, or in Canes. Apuleus in Constantine would haue
 euery Apple wrapped in Rutte leaues, and so laied by: a greate
 sorte of waies beside of keepyng them, you shall reade in diuers
 authours. Some to auoide the hurte of the Froste, vse to couer
 them with wette Linnen clothe, whiche beyng frozen, the fruite
 that lieth vnder it, is preserued. Your Apples must be so laied by
 as the stalkes stande vnderward: neither must you touche any,

Sett apple fū
 30 or 40 foote
 a funder. talk
 not till 14
 14 of Septe.
 not till 17
 6 or 7 daies

To keepe
 Apples make
 windowes to
 North & in
 winter set
 open.

Apples of 3
 yeares old.

to keepe apples
 from rotting.

Go stalkes must
 be down ward

The second booke entreatyng

Cyder.

Vineger out
rather barges

The Pearre.

it libeth a fath
84 moist soile.

fruite trees must
be often digged
about y^e rootes.

Oxe-dunge mixed
with ashes.

Peare is to be
grafted in March

but suche as you neede. Apples are hurtfull to bearyng cattell, so as the sauour causeth them to tyre, as *Lucian* in his *Asse* witnesseth: the like is written of Peares, the remedie thei saie, is to let them eate some of the fruite afore. Of Apples, with certaine Willes for the purpose, thei make a drinke called *Cider*, and a smallie drinke beside with Water, and the refuse of the Apples strained: a good drinke to coole the thirst of the poore labourer. A kinde of Vineger also thei make of Crabbes, and sowre Apples, whiche lying in heape together three or fower daies, thei after wardes putte into a Pipe, or Tunne, wherewith thei mingle Spring water, or Raine water, and so is it suffered to stand close couered thirtie daies, and after takyng out what Vineger thei neede, thei putte in againe as muche water. The Pearre, in Latine *Pirus*, in Greeke *ῥῖνος* and *ῥῖνον*, chalengeeth the net place, and is one of the cheefeste beauties of the Orchard. The Apple Tree spreadeth in broad branches, the Pearre Tree riseth in heighth, and delightheth in a riche and a moiste ground: it dooeth growe of the Kernell, and of the Pippin, but is a greater while before it come to good: and when it is growne, it degenerateth from them his olde good Nature, and therefore it is better to take the wilde plantes, and to let them in their ground in November, and when thei bee well rooted, you maie graffe vpon them. It is saied, that it so prospereth with often diggyng, and muche moisture, as it neuer loseth his flowre. You shall doo greates good vnto it, if euery other yere you bestow some dounge vpon it. Dredginge is thought to make greates and smaller Peares: some put to a litle Ashes to make their taste the pleainter. Thei are not alonely plated of the rootes, but also the verie little twiggess, beeyng plucked from the roote, will growe. If you will set young plantes, let them bee thre yere olde, or at the least two yere olde before you set them. Some againe take the fairest brānches thei finde vpon the Tree, and set them as thei dooe the Olive: the tyme of graffing the Pearre, is March and April. *Plinie* saith, you maie well graffe it, when the blossom is on it, whiche I mee self haue tried to bee true. It is Grafted vpon the Quince, the Almonde Tree, the Pomegranate, the Apple, and the Mulberie Tree: if you graffe vpon the

the Stickerle, yout pceder shalber to Virgill it fitheth to want
ad upon an Ashe, wher eas in deed it will agree with any stocke
the grasse must bee the lict with of a peece, and afore it be grasse,
cleared of all the leaues and redet partes. And if you would haue
the fruite pleasaunt, and the Tree fruitefull, you shall boore a
hole through the stocke close by the grounpe, and dymyng in an
Oken, or a Beeche aspine, couer it by with earth: If the Tree
prosper not, wash the rootes, and water them with lecs of olde
wine fyfteen daies, so shall it beare the better and pleasanter
fruite. It shall neuer be hurt with woornes, if when ye plant it,
you doe anoint it with the Saule of an Oxe: if the Tree (whose
rootes haue been cutte) seme not to prosper, *Palladius* his reme-
die, is to pearce the rootes through, and to dyme in a pime made
either of Oke, or Plumetree. If your Peares be stonie, & choke
Peares, digge by the earth from the rootes, cleanse them of ston-
nes, and sift in good newe moulde againe in the place: Let your
Pearce Trees stande thirtie foote a sunder, or little lesse: your
Apple Tree farther, as I haue saide. Ther are kepte pfectly
sonde waies, some dymyng the stalkes in boiling water, doe
afterwardes hang them by, and so keepe them: others keepe the
in newe boyled wine, or els in a close vessell: others in sand, some
in flockes, and some againe couered with Tcheate, or Chaffe:
some are of opinion, there is no kinde of fruite, but maie be pre-
serued in Hone. Of Peares, *Palladius* teacheth as of Apples, to
make bothe drinke and sause, the iuice being pte with the
presse: women haue a pretie dishe made of Peares for their reli-
gious fastes, called *Castimoniales*. Nexte in order after Apples
and Peares, cometh the Quince, whiche was first by *Caro* cal-
led *Cotoneum*, the Grekes call it *Evagion*, of the cite *Cydon*, fro
whence it was firste broughed, the Italians *Meio cotone*, the
Spaniards *Membrillo*, the Frenchemen *Vn d'ignier*: both the
Grekes and Virgill, call them of the colour *Χρυσονδα*, gol-
den Apples, & *Struthia*, whiche kind (though the differ a litle)
are of this sorte: for *Columella* speaketh of three sortes of Quin-
ces, *Struthia*, *Chrysomela*, and *Musica*, whiche all serue both for
healthe and pleasure. Ther are planted after the same maner
that Peares and Cherries: some affirme, that the set that haue

To keepe
Peares.

Perrie.

The Quince.

The second booke entreating

Quince trees
likeh root &
moist grounde

now y^e quince tre
is dought, it
must be watered
in drie weher
& digged about
to finally

Luna terre ste
To keepe
Quinces.

been sette in Marche, or in Februarie, have taken such Rootes,
as thei haue borne fruite the yere after. Thei growe well in cold
and moiste Countries, in plaine and hillie groundes: In hotte
drie Countries, you muste sette them in October. Many sette
them with the toppes and the sette, but neither of them bothe is
verie good: and beyng seed of science, thei soon degenerate. Thei
are better Grafted in the stocke, then in the backe, and that in
Februarie, or Marche: Thei receiue into their stockes, the graf-
tes (in a maner) of all maner of Trees, the Pomegranate, the
Seruisse, all the sortes of Apples, and make the fruite the bet-
ter. The Quince Tree muste bee sette in that order, that in the
shakynge of the Winde, thei droppe not one vpon the other.
When it is young, or newlie planted, it is helped with dung,
or better with Ashes: thei muste bee watered as often as the sea-
son is verie drie, and digged about continuallie: In hotte Coun-
tries in October, or Nouember, in colde Countries in Februa-
rie, or Marche: for if you dooe not often digge aboute them, thei
will either bee barraine, or beare noughtie fruite: thei must bee
pouined, cutte, and ridde of all encombrances. If the Tree bee
sicke, or prosper not well, the roote must be watered with the mi-
ther of oile, mingled with the like quantitie of water, as Didy-
mus in Constantine saith, or bussecks Lime medled with chalke,
or Rosen and Tarre must bee pouined vpon the rootes: you shal
gether them in a faire daie, beyng sounde and vnsported, and be-
rie ripe, and in the wane of the Moone. Thei are best kept coffe-
ned betwixt twoo holstone Tiles, well closed on euery side with
claire: some laie them onely in drie places, where no winde com-
meth: others keepe them in Chaffe and Wheate: many in honie,
some in Wine, and maketh the Wine more pleasaunte. Demo-
cristus biddeth you beware, that you laie them not neare other
fruite, because with the aire thei will corrupt them. There is al-
so made a kinde of wine of Quinces (beeyng beaten and pressed)
and a little Honie and Oile put vnto it: our countrey men make
of them a precious Conserue, and Parnelade, beeyng congea-
led with long seethynge, and boyled with Sugar, Wine, and spi-
ces. I will now shewe you of the Medlar, whiche the Greekes
call *Medlar*, the Latines *Mespilus*, the Italians *Mespilo*, the
Spaniards

The Medlar.

Spaniard *Mespéro*, the Frenchemen *Mespier*, or *Neffier*, the Dutchemen *Mespelen*: this Tree is also of the number of Apple Trees, and Beare Trees: it is planted in like maner as the Quince is: it delighteth in hote places, but well watered, though it doe well penough in colde. We haue seen it prosper very well among Dkes and Wooddes: for wee haue seen greate Wooddes of them growyng among Dkes, that haue yerely yeelded a greate deale of mouey. Some saie it is planted of the science, in Marche or Nouember, in a well dounge ground and mellowe, so that bothe the endes bee rubbed ouer with doying. It is also set of the stone, but then it is very long before it come to any thyng: it is excellently well grafted in the Bramble, the Pirrie, or the Apple. The Hedlar that you meane to keepe, must bee gathered before thei bee ripe: and beyng suffered to growe vpon the Tree, thei laste a greate parte of the Winter: thei are also preserved in sodden Wine, and Vinegar and Water: In *Catos* tyme thei were not knowne in *Italie*. *Plinie* and others haue spoken of them: neither is it certaine, whether the olde writers tooke theim for *Seruilles*. *Plinie* speaketh of thre kyndes of them: The firste kinde haupyng but thre stones in theim, called therefore *Tricocum*. Wee haue at this daie twoo kyndes, the one haupyng here and there prickles, growyng in euery Wood and Thickette, very sowe afoze it be mellowed, and made soft with frost, and cold of Winter: the other haupyng no prickles at all with a greate fruite, whiche semeth to be brought hereunto by diligent plantyng and Graftyng. The wood of the wilde Hedlar we vse to make Spoakes for Wheeles of, and the twigges of theim serue for Carters whippes. Next vnto the Hedlar for neighbourhood sake, wee must speake of the *Seruille*, a high tree with a round berrie, or fashioned like an Egge: wherefore it is called *Oua* as *Theophrastus* witneseth, and the fruite *Sor*, the Latines call it *Sorbus*, the Italians as the Latines, the Spaniardes *Sernall*, the Frenchemen *Cormie* or *Cormier*, the Dutchemen *Sporeffelbaum*. The fruite growes in clusters as the Grape doeth: the wilde is better then the Garden fruite. It delighteth in colde places, and if you plante it in hote Countries, it will waxe barraine. It hath no prickles as

it liketh in hote
places well
watered.

The *Seruille*
Tree.

it lyeth in colde
places.

The second booke entreatyng

the Medlar hath, it groweth of the stone, the sette, the roote, or the sciens, and prospereth in a colde and wette soile vppon Hilles: it is planted in Februarie and Marche in colde Countries, and in hotte, in October and Nouember: It is grafted either vpon his owne stocke, or on the Quince, or Hawthorne, either in the stocke, or the barke.

THRA. I maruaile how can you haue Pomgranates here, I praie you shewe what order you vse.

Pomgranates.

MARIVS. Among the straunge fruites, there is none comparable to the Pomgranate (so called I thinke) because of his countrey *Carthage* and *Africa*, where the best doe growe: the Tree (as ye see) is not hye, the leafe narrowe, and of a very faire Greene, the flowre Purple, and long like a Coffine, the Apple that is compassed with a chicke rinde, is all full of graines within: it is called of the Greekes *Ρόα* or *Ροία*, as well the Tree as the fruite *Ρόα γλυκεία & οίνωδης*, the Pomgranate Sweete and sowre: it is called in Latine *Malum Punicum*, and *Malum Granatum*, in Italian *Mele grano*, in Spanishe *Granada*, in Frenche *Pomes de Granad*, in Dutche *Granatapfel*. This Tree onely as the Figge and the Vine, the bodie beeyng clouen, dieth not: the branches are full of prickles as the Gozst is: it loueth bothe a hotte grounde, and a hotte countrey, and liketh not watric places. In some hotte Countries, it groweth wilde in the bushes: it is planted in the spring tyme, the rootes beeyng watred with Hogges dounge and stale. It is grafted vpon his owne stocke, and also vpon other Trees, and likewise of the sciences that grow from the rootes of the old tree. And though it maie bee planted sondrie waies, yet the beste waie is the branche of a cubite in length, smoothed with your knife at bothe the endes, and set slope wise in the grounde, with bothe his endes well smeared with Hogges dounge and stale. There is also an other waie of plantyng it, whiche is, to take a very fruitefull stocke, whiche maie be brought to the earth, and hym after the maner of other Trees thei graffe by infoliation, betwixte the barke and the rinde, and well and closely binde it after thei set it in the grounde, not touchyng the grafted parte, but the partes beneath, annoyntyng it with the mother of oile, and make it fast with

with cordes, that it slippe not backe, till the branche be growne. It muche delighteth (as *Democritus* saith) in the Winter, in so muche as the rootes will mete and tangle together with great ioye. The fruite will growe without kernels, if as in the Time the pith beyng taken out, the set be couered with earth, & (when it hath taken) the spring be prouided. There is as *African* reporteth, in euery Pomegranate a like number of graines, though thei differ in bignesse. *Basill* writeth in his *Hexa*, that the sowre Pomegranate will growe to be sweete, if the bodie of the tree nere to the roote bee pearced through, and filled vp with a fatte Pitchtree pin. You shall haue them endure a very great while, if thei be first dipped in skaldyng water, and taken out quickly be laied in drie sande, or els in some heape of wheate in the shadow, till thei be winckled, or els so couered with chaffe, as thei touche not one the other. Other saie, it is best to kepe them like Quinces, couered with plaister, or chalke: for in cold places thei are kept without corruptyng. The rinde of the Pomegranate is called in Latin *Malicorium*, the flowre of the garden Pomegranate *Dioscorides* calleth *Κύτινον*, and of the wilde *βαλάνιον*.

THRA. I heare also, the outlandishe Citron is here very carefully planted.

MARIVS. The Citron, called also the *Median*, the *Persian* and the *Affirian* Apple, because it was first brought out of *Persia*, and from the *Medes*: others saie, it was first brought out of *Africa* into *Greece* by *Hercules*, and therefore *Varro* calleth it, the Apple of *Africa*: thei are called in Greeke *μωσινά*, and in Italian *Citroni*, in Spanishe *Zidras*, in Dutche *Geelenapffel* *Pomerancen*, in Freuche *Citron*: the fruite is called in Latine *Hipericum*, and *Aureum malum*, the golden Apple, also the mariage Apple of *Iupiter* and *Iuno*: suche of them as are yelowre, and of a golden colour, thei commonly call *Oranges*: suche as are of a greenishe pale yelowre, thei call *Cotrolles*, or *Citrus*: those that are long fashioned like an Egge, if thei bee yelowre, are called *Citrons*, if thei bee greene, *Lemons*: if thei be very great and rounde like *Pompeons*, thei call them *Pomcidrons*: the tree doeth alwaies beare fruite, some fallyng, some ripe, and some springyng, nature the wyng in the a wonderfull

Citrons.

The second booke entreatyng

fertilitie, as in the Trees that *Homer* describeth in the Orchardes of *Alcionous*. The leafe is like the Baie leafe, sayng that there growe pickles amongst them: the fruite is yelow, wrinkled without, sweete in sauour, and sowre in taste: The kernelles like the kernelles of a Peare, a greate risister of popsons. The Tree is planted (as *Palladius* saith) (fower maner of waies, of the kernell, the sciens, the branche, and the stocke. If you will set the kernell, you must digge the earth two foote euery waie, and myngle it with Ashes: you muste make shorthe beddes, that thei maie be watred with gutters on euery side. In these beddes you must open the earth with your handes a hand breadth, and set three kernelles together with the toppes downward, and beyng couered, water them euery daie, and whē thei spryng, leaue no weedes nere them: thei will spryng the soner, if you water them with warme water: Others saie, it is beste the graines beyng taken out in the spryng, to set them diligently in good mellowed furrowes, and to water them euery fourth or fifth daie: and when thei begin to growe, to remoue them again in the Spryng, to a gentle and a moiste ground, for it delighteth in muche wette: if you sette the branche, you must not sett it aboue a foote and a halfe in the ground, leaste it rotte. The sciens and the stocke, *Palladius* thinketh it better to be planted, and sheweth whiche waie. If any man meane to cherishe this tree, let hym defende it well from the North, and set it toward the South, and the Sunne in the winter, in frailes and baskettes: wherefore, some that are carefull and diligent in the tending of this tree, do make little vaultes toward the South close couered, and within them nere the wall, thei plant the Dreng, suffryng the vaultes all Sommer to lye open to the Sūne, and to haue the heate therof: and assone as winter comes, thei couer the straight with strawe, or mattes, specially with the stalkes of gourdes. This tree delighteth to be continually digged about, thei are grafted in hotte places in Aprill, in colde Countries in Maie, not vnder the barke, but cleauing to the stocke hard by the roote: thei maie be grafted bothe on the Peare tree, & the Bulbery: but whē thei are grafted, must be fenced either with a wicker basket, or some earthen vessell. The fruite will be sweete, if the

the kernes be steeped in Water sodde with Honie, or whiche is better in Sheepes Milke. Such: as you meane to keepe, must be gathered in the night, the Moone beyng doune, and gathered with braunches and all, as thei hang. Where the fruite burdeneth the Tree, you must pull them of, and leaue but fewe on it, whiche will be the pleasaunter, and the kindlier fruite. It is at this daie nourished bothe in Germanie and Fraunce, and is planted in vessels full of earth, and in hotte weather is sette abroad in the Sunne: in colde weather sette in Sellers, or in hotte houses. I haue seen in Germanie, certaine hotte houses of purpose made of firrhe boardes, that in Winter haue warmed all the Garden, and in Sommer the frames taken awaie, haue giuen place to the Sunne. If while thei be young and little thei bee put into earthen vessels, or glasse, thei growe accordyng to the proportion thereof: so that you maie haue them fashioned either like a man, or like a beast, accordyng to your fancie: But you must so order your mouldes, as the apye maie come to the. But least I keepe you too long with these outlandishe trees, I will speake somethyng of our owne Trees, wherewith we are better acquainted: Among whiche wee haue the Mulberie, in Latine *Morus*, in Greeke *Μορια*, the fruite *συμμιρον*, in Italian *Moro*, in Spanishe *Mora*, in French *Mourre*, in Dutche *Mulbern*: this is accounted of all other trees the wisest, because he neuer blossometh, till all colde weather bee quite past: so that whenso euer you see the Mulberie begin to spryng, you maie be sure that winter is at an ende: he is ripe with the first, and budeth out so hastily, as in one night with a noise, he thrusteth out his leaues: thei dye the handes (as *Plinie* saith) with the iuice of the ripe berrie, and washe it of with the grene berrie: he changeth his colour thise, first white, then redde, and lastly blacke: he loueth hotte places, and grauellie, and delightes in diggyng and doungyng, but not in wateryng: his rootes must be opened about October, and the Lees of Wine powred vpon them: it is sette of the stones, but thinn: it often groweth to bee wilde: the beste plantyng is the sciens, and the toppes, a foote and a halfe long, smoothe at bothe endes, and rubbed ouer with doung. The place wherein you set your settes, thei couer with Ashes ming-

The Mulberie Tree. *mulber*
the wisest tree

it like hotte & granelly places, & requirith digging & dounging, but no wateryng

The second booke entreatyng

led with earth, but couer it not aboue fower fingers thicke. *Palladius* bidde you to set it in Marche, and to remooue it in December, or Nouember. *Devinus* telleth, that the *Hulberie* maie be planted in the fall of the leafe, by thrustyng into the ground the branches, after the order of the *Figge Tree*, whiche I mee self haue proued, speciall, if the ende that is cut bee well hused, that it shal the quicklier take roote: and so whē you haue made your hole with a stake thrust it in: it is best grafted on the *Beech*, and the white *Hoplar*, either by graftyng in the stocke, or by inoculation: and so shall the berries be white. It is grafted also in the *Figge*, and the *Eline*, which in old time thei would not suffer, for feare of corruptyng. Of the *Hulberie* is made a very notable medicine for the stomacke, and for the *Goutte*: thei will longest endure (as it is saied) kept in glasses. The leaues doe serue to feede silke wormes withall, wherof some make a very great gaime, and set them rather for that purpose, then for the fruite.

THRA. What Tree is that with the Ruddy coloured fruite is like a *Cherie*:

The Cornel

MARIVS. It is a *Cornell Tree*, called in Greeke *κεραυια*, in Latine *Corbus*, in Italian *Corneolo*, in Spanishe *Zereko selnestro*, in Frenche *Cornier*, in Dutche *Cornelbaum*, the Tree is thought neuer to excede twelue cubites in height: the bodie is sounde and thicke like *Horne*, the leafe is like an *Almonde* leafe, but latter, the flowre and the fruite, is like the *Dhūe*, with many berries hanging vpon one stalk, first white, and after redde: the iuice of the ripe berries, is of a bloodie colour: it loueth bothe *Hountaines* and *Vassers*, and prospereth bothe in moiste ground, and drie: it groweth bothe of the slippe, and of the seede. You must beware you plant it not nere to your *Bees* for the flowre doeth kill as many of them as tasteth it.

Ziziphus.

THRA. What Tree is the same that groweth next vs?
MARIVS. That Tree is called *Ziziphus*, in Greeke *ζιζυφα*, in Italian *Ginggiolo*, in Spanishe *Azofeiso*, in French *Ininba*, in Dutche *Bursthyrle*, the berries wherof, are like the *Cornell* berries, the flowre like the *Oliue* flowre, but more sweeter. *Columella* speaketh of twoo kindes thereof, the one redde, the other white, thei are set of the stones, in hotte Countreies

tries in Aprill, and in colde places in Maie, or els in Iune: you maie sette bothe the stone, and the braunche, it is very slowe in growyng: if you set the plant, you must doe it in Marche in soft ground: but if you set the stone, you muste set them in a little trenche of a hande broad, the stones together, with their pointes doume ward: It loueth not too riche a grounde, but rather a light grounde, and a warme place: In Winter (as *Palladius* saith) it is good to laie stones about the bodie of the Tree. The nexte are Italian Filbertes, in Latine *Pistacea*, in Greeke *πισταχια*, in Italian *Pastinachi*, in Spanishe *Alhozigo*, in Frenche *Pistaches*, in Dutche *Welfce pimpermus*, the leafe is narrowe and browne, for vpon the branches hang the Nuttes, like the Nuttes of the Pine. Of this Tree it is thought there is bothe male and female, and therefore thei growe commonly together, the male haupng vnderneath his shell, as it were long stones: It is graffed aboute the firste of Aprill, but vpon his owne stocke, and vpon the Cerebinthe, and the Almonde Tree. Thei are also sette (as *Palladius* witnesseth) in the fall of the leafe in October, bothe of the Sippes, and the Nutte: It delighteth in a hotte and a moiste countrie, and loyes in often watryng.

Italian Filberts.

hotte & moist

THRA. Because I remember you tolde me before, that of plantes and Trees some doe growe of the seede, or fruite, and some are Graffed: and because I haue heard the graffing of mooste of them, I would now faine heare you speake of suche Trees as growe onely of the stone, or berrie.

MARIVS. Your remembraunce is good: for though thei commonly growe better when thei bee graffes, yet some there bee that prosper the better beeyng sown, and will scarce growe any other waie. And though some of the foresaied trees beynge sette, doe well prosper, as the Medlar, the Cornell, and diuers other, yet sometymes thei waxe wilde, and are long before thei come to perfection, whiche *Virgill* also affirmeth, For that same Tree that of the seede, the stone, or berrie growes, Daeth slowly spryng, and long it is ere any fruite he shewes: And when it comes, it proueth wilde, and doeth degenerate, And loseth that same relish sweete, that longeth to his state.

but

The second booke entreating

but by Graffing it is restored againe. Some of them againe, how so euer thei bee sowne or sette, doot not degenerate, vñ growe out of kinde, as the Baye, the Date, the Cypressse, the Peach, the Abricotte, the Damson, the Pistace, the Firrhe Tree, and the Cherie: and because thei bee not all of one order, I will tell you seuerally of the cheefest of them. To plant trees of the seede, Nature (as I saied before) taught men at the first: the seede beeyng deuoured of Birdes, and with the dounge lette fall in the cleftes of Trees, where thei after sprong and grewe. The Baye in Greeke *Λαφρις*, in Latine *Laurus*, in all other tongues almoste as in Latine. The berrie is called in Greeke *Λαφρις*, in Latine *Lauri bacca*, in Italian *Bacche de lauro*, in Sparishe *Vaya de laurel*, in Dutch *Lorboren*, a most gratefull Tree to the house, a porter to Emperours and Bishoppes, which cheefly garnisheth the house, and standeth alwaies at the entrie. *Cato* maketh twoo kindes thereof, the Delphick, and Cypressse: the Delphick, equally coloured and greener, with great berries, in colour betwixte Greene and Redde, wherewith the Conquerours at Delphos were wont to be crowned. The Cypressse Baye hath a shorter leafe, and a darker greene, guttered (as it were) rounde about by the edges, whiche some (as *Plinie* saith) suppose to be a wilde kinde: it groweth alwaies greene, and beareth berries: he shooteth out his branches from the sides, and therefore wareth some old and rotten: it doeth not very well auaile with cold ground, beeyng hotte of nature: it is planted diuers waies, the berries beeyng dried with the North winde, are gathered and laied abroade very thynne, least thei cluster together, afterward beeyng wette with Urine, thei are set in furrowes a handfull deepe, and very neare together: in Marche thei be also planted of the slippe, and the sciens. If you sette them of the slippe, you muste set them not passing ix. foote a sonder: but so thei growe out of kind. Some thinke, that thei maie be graffed one in an other, as also vpon the Seruissle and the Ashe: the berries are to be gathered about the beginning of December, and to be set in the beginning of Marche. Nut trees are moste commonly planted of the Nut, as all other shell fruites are. Of all Nuttes the Almond is counted to be the worthiest, called in Greeke

The Baye.

How Bay Tree
groweth hotte soile

How of Seruissle
is Planted
how of Styppe.

¶

Nutte Trees.
The Almond
Tree.

Greeke *Αμυγδαλα*, in Italian *Mandorle*, in Spanishe *Almeidas*, in French *Amandes*, in Dutche *Mandelen*, thei are sette in februarie, and prosper in a cleare and hotte grounde, in a fatte and a moiste grounde thei will growe barraine: Thei cheeflie sette suche as are crooked, and the young Plantes, thei are sette bothe of the Slippes, the Roote, and the Kernell. The Nuttes that you intende to sette, must bee knied a daie before in softe doung: Others keepe them in Water sodde with Honie, lettynge them lye therein but onely one night, least the sharpe-nesse of the Honie spoile the Plant: and beyng thus ordered, *Columella* saith, thei will bee bothe the pleasaunter, and growe the better. The toppes and the sharpe endes you must sette downeward: for from thence cometh the roote, the edge muste stande toward the North: you must sette thre of them in a Triangle, a handfull one from the other: thei must bee watered euery tenne daies, till thei growe to bee greete: It is also planted with the branches, taken from the middelt of the Tree. The Almonde is grafted not neare the toppe of the stocke, but about the middelt, vpon the bowes that growe out. This Tree dooeth soone beare fruite, and flowreth before all others, in Ianuarie, or februarie. *Virgill* accountes it for a Prognosticatour of the plentifulnesse of Coine.

Note

*When thicke the Nutte Tree flowers amidst the wood,
That all the branches laden bende withall:
And that thei prosper well and come to good,
That yere bee sure, of Corne shall plentie fall.*

The bitter ones (whiche are the whollsommer) are made sweete, if rounde aboute the Tree, fower fingers from the Roote, you make a little trench, by whiche he shall sweate out his bitterness: or els if you open the rootes, and poure thereon either Urine, or Hogges doung: or if at the roote of the Tree, you thrust in a fatte wedge of Pitche Tree. By this meanes (as *Basil* saith) thei will loose their bitterness: but no Tree groweth sooner out of kinde, and therefore you muste often remooue it, or graffe it when it is greete. *Walnuttes*, called in Greeke *καρυα* *Basiliua*, in Latine *Ingintes*, in Italian *Nocy*, in Spanishe

Walnuttes.

Nuizes,

The second booke entreasyng

fuglans

*it Liketh a drie
81 cold shales*

Nuzes, in *French Noix*, in *Dutche Grosse nusz*: thei are sette in the grounde (as *Plinie* saith) the same downeward, aboute the beginning of *March*: some thinke, that thei will growe as the *Filbert* dooeth, either of the slippe, or the roote: it groweth speedely, and liketh a drie and colde place, better then a hotte. The Nutte that you meane to set, will growe the better, if you suffer it to lye fower or five daies before in the water of a bove, and will prosper the more, if it bee often remoued: those Nuttes (as it is thought, prosper beste, that are let fall by *Crowes*, and other *Birdes*. If you pearce the Tree throug with an *Augur*, and fill up the place againe with a pinne of *Elme*, the Tree shal lose his knottie hardnesse, neither will he lose his fruite, if you hang by either *Hallet*, or a peece of *Skarlet* from a downghill.

THRA. What is the reason you plant your *Walnutte* Trees rounde about on the outside of your *Orchard*, and not among your other Trees?

MARIVS. Because his shadowe is greate, and ynholde some, beside the hurte he doeth with his droppynge. He sucketh out a greate deale of good iuice from the ground: for as you see, thei are verie mightie and high Trees, so as some of them are twoo or thre fadome about: thei occupie a greate deale of come with their standpng, and beguile the other Trees of their sustenance: Besides, there are certaine Trees thei agree not well withall, and therefore haue I sette them on the outside of my *Orchard*, as standardes to defende their fellowes from tempest and weather. Among Nuttes, is also to bee recounted the *Hassell Nutte*, a kinde whereof is the *Filberte* called in *Greeke* *νὰειορ*, in *Latine* *Auellana*, in *Italian* *Nocinole*, in *Spanishe* *Auellamas*, in *French* *Noysette*, in *Dutche* *Haselnusz*: thei are planted after the maner of the *Almonde*: it delighteth in claiie and watrishe groundes, and bypon hilles, beeyng well able to abide the colde. Thei were firste brought into *Asia* and *Greece* from *Pontus*, and therefore called *Pontica*, and *Heracleotica*. &c. Among the Nuttes also chalengeeth the *Chestnutte* his place, though he bee rather to bee reckoned among *Haste*, whereby is called the Nutte, or Haste of *Iupiter*, in *Greeke* *ναοαυα*, in *Latine* *Castanea*, in *Italian* *Castagne*, in *Spanishe* *Castana*, in *French*

Haselnuttes.

Filbertes.

Chestnuttes.

French Castagnes, in Dutche Kasteij: it loncth well to growe on mountaines, and in colde countreys: it hateth waters, and desireth a cleane and a good mould: it misliketh not a moiste grauell grounde, and topneth in a shadowie and Northerly bancke: it hateth a stiffe and a redde claie grounde, it is planted bothe of the Nut, and the set: it is better plantyng woodes of them of the Nut, then of the set, other wise the safer waie were the set, which in twoo yerres beareth fruite. It is planted when the Sunne is in the Equinoctial, bothe of the science, the set, the branche, and the roote, as the Oliue is. The Chestnuttes that you meane to sowe, must be verie faire and ripe, the newer thei bee, the better thei growe: you must not set them after that sorte that you sette Almonds, or Filbertes, but with the sharpe ende byward, and a foote a sonder: the furrowe must be a shaftman deepe. You wer better (as I saied) to make your Groue of the Nutte, then of the settes, whiche will be meete to bee filled for staies in seven yere. Columella writeth, that the Chestnutte meete for the suppoztynge of Vines, if he be sowed in well digged grounde, dooeth quickly spryng, and beeyng selled after fve yerres, it prospereth like the Willowe: and beeyng cutte out in staies, it lasteth till the nexte fellyng, as shall bee shewed hereafter, when wee speake of Woodes. Thei will also haue the Chestnut to be grafted on the Walnut, the Beeche, and the Oke; it hath been seen, that where thei growe twoo and twoo together, thei prosper the better. The Pine, in Greeke *πιτυς*, in Latine *Pinus*, in Italian and Spanishe *Pino*, in French *Pin*, in Dutche *Hartzenbaum*, is planted not muche vnlike to the Almonde, the kernels of the keie clockes beeyng sette as the Almond is: thei are gathered in Iulie, before the Caniculer windes, and ere the Nuttes, the hulke beeyng broken, fall out. The beste tyme of sowynge them, Palladius reckoneth to be October, and November: this tree is thought to be a nourisher of all that is sowed vnder it. The Witche tree is called Greeke *πικύνη*, in Latine *Picea*, in Italian *Pezzo*, in Spanishe *Pino negro*, in Dutche *Rotdannenbaum*, but I come now to the Cherie. The Cheritree, in Greke *κεράσιος*, the fruite *κεράσιον*, in Italian the Tree *Ceraso*, the fruite *Ceraso*, and *Ciregie*, in Spanishe *Cerezo*, and *Cereza*, in French *Cerisier*, and *Cerise* in Dutche

the Semple is to be planted at the Nutt.

sharp ende by

grafted & the semple bypon the roote beeyng or y^e oke.

The Cherie Tree.

The second booke entreating

Dutche *Kirshamm*, *Kerssen*: the Tree is easie to bee planted, if the stores bee but caste abroad, thei will growe with greate encrease: suche is their forwardnesse in growyng, that the staves, or supporters of Vines, beeing made of Cherie Tree, are commonlie seen to growe to bee Trees. Thei are grafted vppon the Plonie Tree, vppon his owne stocke, vppon the Plane Tree, and on the Bramble, but beste vppon the wilde Cherie it ioyneth in beeing grafted, and beareth better fruite: if you graffe theim vppon the Vine, your Tree shall beare in the Spring: the tyme of graffing, is either when there is no Summe vppon theim, or when the Summe hath lefte rumpng. Thei remooue the wilde plante, either in October, or Nouember, that the first of Ianuarie or Februarie, when it hath taken roote, it maie bee grafted vppon. *Martiall* woud haue you graffe it in the stocke: but in deede it prospereth better, beeing grafted betwixt the barke and the woode. It delighteth to bee sette in deepe trenches to haue some penough, and to bee often digged about. It loueth to haue the withered bowe continuallie cutte awaie: it groweth beste in goodde places, and so hateth being, as if it bee laied aboute theim, thei growe to bee wilde: it is also planted of the slippes, and will beare his fruite without stone: if in the setting of the sette, you turne the vpper ende down ward. Others will, that the Tree beeing young and twoo foote hie, bee slitte downe to the roote, and the pith take out of bothe sides, and ioyned together, the seames close bound about, and couered with doeing: whiche within a yere after, when it is well grown, the young grasses (whiche hitherto haue borne no fruite) if you graffe them, will beare Cherries without stones, as *Martiall* saith. There are sundrie kindes of Cheris (as *Plinie* reporteth, or *Apronianus*) that are redder then the rest, *Adrianus* as blacke as a cole: whiche kinde in Germanie yet at this date, thei call *Achlsche Kirschen*, *Celicians*, that are round *Plinie* in speaking of the sundrie sortes, preferreth the *Duracins*, whiche in *Campania* thei were wonted to call *Plinians*: and a litle after he saith, vpon the bankes of the Rhine, there grow also *Kerssen*, of colour betwixt blacke, red, and greene, like the Juniper berries, when thei bee almoste ripe: in whiche the common sort of bokes haue *Tertius* for *Kerssen* among the Germans; for *Plinie* whereas

ie. litch cold blacke

whereas in manie places he vsurpeth the Dutch woordes, as in the 9. 10. 17. and. 18. booke, and in diuers other places, whiche being not vnderstanded of the Latine, came altogether corrupted to the posteritie. There are also Bay Cherys, grafted at the fyist in the Bay, that haue a pretie pleasant bitternesse: at this day, the small Cherys are best esteemed, growyng vpon a lowe bushe with short stalkes, round fruite, and verie red, much meate, soft, and full of licour. It is sayd the will beare verie tymely, if you lay Lime about them: it is good to geather them often, that they whiche you leaue, may wate the greater: for setting and plantyng of Cherys, you may reade a greate sorte of rules in the geatheringes of Constantine. There are also found a kinde of Cherys growyng wyde in the Woods, and Hedgerowes, with little beries, some redde, some altogether blacke, whiche the Farmers in the Countrey doe vse for to latte theyr Hogges withall. The Plome tree, in Greeke *κονκυμαλος*, the fruite *κονκυμαλα*, in Latine *Prunus* & *Pruna*, in Italian *Prune* and *Succine*, in Spanishe *Ciruelo* and *Cirnela*, in French *Prune*, in Dutch *Proumen*, it is planted from the middle of Winter, till the Ides of Februarie: but if you set the stones at the fall of the leafe, let it bee doone in November, in a good and mellowe ground, two handfuls deepe: they may be likewise set in Februarie, but then they must be steeped in lye three dayes, that they may sooner spring: they are also planted of the young setts that growe from the body of the tree, eyther in Ianuarie, or in the beginning of Februarie, the rootes being well couered with dung: they prosper beste in a ritche and a moyst ground, and in a colde countrey: they are grafted towarde the ende of Marche, and better in the clouen stocke, then in the backe, or els in Ianuarie, before the Gumme begonne to droppe out: it is grafted vpon his owne stocke, the Peache, and the Almonde. There are sundry sortes of Plomes, wherof the Damson is the principal, loying in a drie ground, and in a hotte countrey, and is grafted as the other Plomes are. There are diuers coloured Plomes, white, blacke, purple, and redde: Wheate Plomes, and Horse Plomes, wherewith they vse to latte Hogges. The finger Plomes are mooste commended, beeyng of length of a mans

Lyme laid abo
y^e roote of y^e tree
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Ploms trees. #

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The second Booke entreating

The Peach
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finger, which are brought unto vs from *Bohemia*, and *Hungary*,
and *Indians*, and *Noberdians*, beeing blew in colour, but later,
The Damsons are dyed in the sunne vpon Lattyses, Leades,
or in an Ouen, some doo dippe them before, eyther in Sea wa-
ter, or in Wine, and after dye them. The Peach Tree, called
in Greeke *περσινάμηλα*, the tree *περσινά*, in Latine *Persica*, in
Italian *Persea*, in Spanish *Durafua*, they are also called *Rho-*
docina, and *Dprocina*, or *Duracina*, whereof there are foure
kinds: but the cheefest are the *Duracins*, and the *Abrecots*:
in Nouember in hotte countreys, and in others in Ianuarie, the
stones are to be set two foote a sinder in well dyessed ground,
that when the young trees are sprung vp, they may be remoued:
but in the setting, you must set the sharpe ende downward, and
let them stand two or three syngers in the ground: where soeuer
they grow, they reioyce most in watry groundes, which ground
if you want, looke that you water them abundantly, so shall
you haue greate store of fruite. Some woulde haue them set in
hotte countreys and sandy ground, whereby they say, their fruite
will longer endure: the better will also the fruite bee, if as soone
as you haue eaten them, you set the stone, with some part of the
fruite cleaupng to it: it is grafted either ou hym selfe, the Al-
mond, or the Plome tree. The Apples of *Armenia*, or *Abriocot*,
dooth farre excell the Peach, vsed as a greate dayntie among
noble men, and muche desired of the sicke: they are best grafted
in the Plome, as the Peach in the Almond Tree: the sayrest
graftes that growe next the body of the tree are to be chosen and
grafted in Ianuarie, or Februarie, in cold countries, and in No-
uember in hotte: for if you take those that growe in the toppe
they will either not grow, or if thei growe, not long endure. You
shall inoculate, or imbuddes them in May, or Aprill, the Stocke
beeing cut aloft, and many young buddes set in: neyther muste
you suffer them to stand berie farre one from the other, that they
may the better defend them selues from the heate of the Sunne.
The Frenchmen, and our Gardners also, after the Italians or-
der, doe graffe the *Abriocot*, taking a Graft (not full a synger
long) or the budde that is well shoute out, with a little of the
rynde cut of, and slitting the rynde of a young Plome tree crosse-
wyle

wise, they set them in, bindyng them well about with Hempe, or
Towe, and that in the ende of June, or in July, and August, #
Some thinke they will be redde, if they bee either grafted in the
Plane tree, or haue Roses set vnderneath them: they wyl also
be figured, or wrytten in, if seauen dayes after that you haue sette
the stone, when it beginneth to open, you take out the Kernell
and with Vermilion, or any other colour, you may counterfaite
what you will, after the stone closed vp about it, and couered
with Clay, or Hogges dour, you set it in the ground. Againe,
you shall haue them without stones, if you pearce the Tree thro-
rogh, and fill it vp with a pinne of Myllowe, or Cornell tree:
the pith being had out, the Rootes of the Tree must be cut and
dressed in the fall of the leafe, and dourged with his owne leaues:
you shall also at this time proune them, and ridde them of all rot-
ten and dead bowes. If the tree prosper not, poure vpon the roo-
tes the lees of olde wine mingled with water. Against the heate
of the sunne, heape vp the earth about them, water it in the eue-
ning, and shadow them as wel as you may. Against the frostes,
lay on douring enough, or the Lees of wine medled with Water,
or water wherein Beanes haue been sodden: if it bee hurt with
woormes, or such baggage, poure on it the vyne of Oren, med-
led with a third parte of Vineger. The Date Tree, in Greeke
Φαινξ, In Italian, in Latine, and in Spanishe Palma, in French
Arbor de Dattes, in Dutch Daetelenbaum: the fruit in Greeke
Ἀκτῦλοι, in Latine Palmula, in Italian Dattoli, in Spanishe
Dattiles, in French Dattes, in Dutch; Daetelem, it groweth in
a milde grauelly ground, and delighteth in a watry soyle: and
though it desire to haue Water all the yeere long, yet in a drye
yeere it beares the better: and therefore some thinke, that douring
is hurtfull vnto it. About the riuer Nilus, and in the East partes,
it groweth pteously, where as they vse to make both wine and
bread of it: this tree in Europe (for the most parte) is barrayne,
though it bee planted of many for noueltie sake. The stones of
Dates are planted in trenches of a cubite in deapth and breadth,
the trenche filled vp agayne with any maner of douring, except
Goates douring: then in the middell of the heape set your stones
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The Date,

The second Booke entreating

finger, which are brought unto vs from Bohemia, and Hungary, and Indians, and Netherlanders, beeing blew in colour, but later. The Damsons are dried in the sunne vpon Lattyses, Leades, or in an Ouen, some doo dippe them before, eyther in Sea water, or in Brine, and after drie them. The Peach Tree, called in Greeke *περσικα μυλα*, the tree *περσικα*, in Latine *Persica*, in Italian *Persea*, in Spanish *Durafua*, they are also called *Rhodocina*, and *Dporcina*, or *Duracina*, whereof there are foure kinds: but the cheefest are the *Duracins*, and the *Abrecots*: in Nouember in hotte countreys, and in others in Ianuarie, the stones are to be set twoo foote a sinder in well dressed grounde, that when the young trees are sprung vp, they may be remoued: but in the setting, you must set the sharpe ende downeward, and let them stand two or thre fingers in the ground: wherefoeuer they grow, they reioyce most in watry groundes, which ground if you want, looke that you water them abundantly, so shall you haue greate store of fruite. Some woulde haue them set in hotte countreys and sandy ground, wherby they say, their fruite will longer endure: the better will also the fruite bee, if as soone as you haue eaten them, you set the stone, with some part of the fruite cleauing to it: it is grafted either on hym selfe, the Almond, or the Plome tree. The Apples of Armenia, or Abricot, dooth farre excell the Peach, vsed as a greate dayntie among noble men, and muche desired of the sicke: they are best grafted in the Plome, as the Peach in the Almond Tree: the fayrest graftes that growe next the body of the tree are to be chosen and grafted in Ianuarie, or Februarie, in cold countries, and in Nouember in hotte: for if you take those that growe in the toppe they will either not grow, or if thei growe, not long endure. You shall inoculate, or imbuddge them in May, or Aprill, the Stocke beeing cut aloft, and many young buddes set in: neyther muste you suffer them to stand verie farre one from the other, that they may the better defend them selues from the heate of the Sunne. The Frenchmen, and our Gardners also, after the Italians order, doe graffe the Abricot, taking a Graft (not full a synger long) or the budde that is well shoute out, with a little of the rinde cut of, and slitting the rinde of a young Plome tree crosse-

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The Dates

The second Booke entreatynge

towarde the East: and after, when firste they haue sprinckled thereon a little Salt, they couer them with earth, well medled with dounge: and euerie daye whyle it springeth, they water it: some remoue it after a yeres growth, other let it growe till it be greate. Moreouer, because it delighteth in Salt ground, the rootes must be dressed euery yere, and salt throwen vpon them: and so will it quickly growe to be a great Tree. The settes are not presently to be put in the ground, but first to be set in earthen pottes, and when they haue taken roote, to be removed. Date trees haue suche a delight one in the other, that they bende them selues to touche togeather, and if they growe alone, they were barrayne. They are planted (as *Plinie* sayth) of the branches, two cubites long, growyng from the topp of the tree: also of the slippes and shuers. The same *Plinie* affirmeth, that aboute *Babylon*, the verie leafe (if it be set) doth growe.

T H R A. I remember you tolde mee once, the spring and scyens that groweth out of the rootes of some Trees, will verie well be planted.

M A R I V S. I tolde you before, that diuers of the trees whereof I spake, might bee planted of the branches, and of the sciences, haupng some part of the Roote plucked by with them: and so I sayde the Chery might be planted, as also the Haseell, the Laurell, the Myrtell, and the Medlar: likewise, the fayrest branches slipped of, and the endes a little brused, and thrust into the ground, commonly doo growe to be trees, as I mee selfe haue tried both in the Mulbery, the Pearre tree, and the Apple tree. One thing I will adde besyde, that the trees that beare fruite ouer hastily, doe either neuer come to their iust bignesse, or the fruite that they beare, dooth neuer long endure: wherefore I thinke sprang fyrst that lawe of Moles, that fruite Trees should for thre yeres be counted vncircumcised, and their foreskinnes with their fruite, should bee circumcised: that is, the burgens and blossomes should be plucked of, lest he should beare before his tyme, or when he hath borne, lose his fruite: but I keepe you too long in the describving of my Orchard.

T H R A. O no, I rather (whylest I heare you) imagine mee selfe to bee amongst them, plantyng and viewyng of the frutes:

fruite: but now remaineth, that in steede of a conclusion to your talke, you declare the order of preserving them, to that ende specially, that those thinges that are appoynted for remedie (being not duely, or in tyme administred) be not rather a hurt, then a helpe.

M A R I V S. Your motion is good: first therefore, and generally, dounging and watring is needefull for fruite Trees, a very fewe excepted: and herein heede must be taken, that you doo it not in the heate of the Summe, and that it bee neither too newe, nor too olde: neither must it bee laide close to the foote of the tree, but a little distaunce of, that the fatnesse of the doung may be druncke in of the roote. Pigeons doung, and Hogges doung, doe also heale the hurtes or woundes of trees. The water wherewith we water them, must not be Fountayne water, or Well water, if other may be had, but drawen from some muddy Lake, or standing Poole. Moreover, you must take heede, (as I also tolde you before) when we beganne to talke of planting of an Orchard, that your trees stand a good distance a sinder, that when they are growen up, they may haue roomie penough to syccade, and that the small and tender, bee not hurt of the greater, neither by shadowe, nor dropping. Some woulde haue Pomegranate trees, and Hyttels, and Vays, set as thicke together as may bee, not passyng niene foote a sinder: and likewise Chery trees, Plome trees, Quinces, Apple trees, and Peare trees, thirtie foote and moe a sinder: euery sort muste stande by themselves, that (as I laide) the weaker be not hurt of the greater. The nature of the Soyle, is herein most to bee regarded: for the Hill requirereth to haue them stande nearer together, in windy places you must set them the thicke. The Dyue (as Cato saith) will haue fine and twentie foote distaunce at the least. You must set your plantes in suche sort, as the tops be not hurt, or brused, nor the barke, or rynde flawed of: for the barke beyng taken away round about, killeth any kind of tree, You must also haue a regard of the shadowe, what trees it heldeeth, and what trees it hurteth. The Walnut Tree, the Pine tree, the Pitche tree, and the Fyre tree, what so euer they shadowe, they popson. The shadowe of the Walnut Tree and the

Epilogue

Dounging

watring

to be set a good distaunce a sinder

set not under footes or upon drye places.

Shadowe of some of trees, as Poison to other trees.

N. is.

Dke

The second Booke entreatyng

Oke is hurtfull to Come: the Walnut tree with his shadowe
also, is hurtfull to mens heads, and to all thinges that is planted
neare it. The Pine tree with his shadowe like wise, destroyeth
young Plantes: but they both resist the winde, and therefore
good to enclose Vineyardes. The Cypresse, his shadowe is ve-
ry small, and spreadeth not farre. The shadowe of the Figge tree
is gentle, though it spreade farre, and therefore it may safely ve-
nough growe amongst vines. The Elmie tree, his shadowe
is also mild, nourishing whatsoeuer it couereth. The Plane tree,
though it be thicke and grosse, is pleasaunt. The Poplar hath
none, by the reason of the waivering of his leaues. The Alder tree
bath a thicke shadowe, but nourishing to his neighbours. The
Vines is sufficient for hym selfe, and the mouyng of his leafe
and often shaking, tempereth the heate of the sunne, and in great
rayne well couereth it selfe. The shadowe of all those, is com-
monly milde and gentle that haue long stalkes: the dropping of
all trees is nought, but worst of all those, whose branches growe
so as the water can not redily passe through: for the droppes
of the Pine, the Oke, and the Bastholme, are most hurtfull,
in whole company you may also take the Walnutte: the Cy-
presse (as Plinie saith) hurteth not. Doreouer, proyning and
cutting, is very good and necessarie for trees, whereby the dead
and withered bowes are cut awaye, and the vnpromitable bran-
ches taken of: but to proyne them euery yeere is nought, though
the Vine requireth cutting euery yeere: and euery other
yeere, the Myrtle, the Bonitraguare, and the Olive, whereby
they will the sooner beare fruite: the others must be the seldo-
mer proyned. Olive trees must bee proyned in the fall of the
leafe, after the setting of the seven starres: and first, they must be
well doungeed, as a helpe against their hurtles. You must cut a-
waie all the olde rotten Branches that growe in the midst,
and such as growe thicke, and are tangled togeather, and all the
waterbowes, and vnpromitable branches about them: the olde
ones are to bee cut close to the stocke, from whence the newe
sprunges will aryse. Scarefyng also or lapyng, is very holso-
some for the trees, when they are screynd with their leaues, and
drynesse of their barkes, at whiche tyme wee vse to launce the
barkes

Vines, the
 mid shadow of
 some trees is
 so fortable.

Dropping of
trees.

Proyning.

Snow whay y^e
 barres sett.

Scarefyng.

barke with a Sharpe knife, cutting it straght downe in many places: whiche, what good it dooth, appeareth by the opening and gaping of the rinde, whiche is straightwayes filled up with the bodie underneath. You must also trimme and dresse the rootes of your Trees after this sorte. You muste oven the grounde round about them, that they may be comforted with the warmth of the Sunne, and the Rayne, cutting away all the rootes that runne upward. The trees that you remoue, must bee marked whiche way they stood at the first: for so teacheth Virgil.

Ablaquea-
tion.

Remouyng.

And in the barke they set a signe,

To knowe which way the tree did growe.

Which part did to the South encline.

And where the Northerne blastes did blowe.

Also, you must consider well the nature of the Soyle, that you remouue out of a dype ground, into a moyst, and from a barraine hill, to a moyst playne, and rather fatte, then otherwise. The young plantes being thus remoued, must in the second, or third yeere be pruned, leauyng still about thre or foure Branches vntouched, so shall they the better growe: this must you usually doo euery other yeere. The old tree we remoue with the toppes cut of, and the rootes disperished; whiche must be helped with often doungyng and wateryng. Apple trees that blossome and beare no frute, or little beare, they sodenly fall away, you shall remedy by flitting of the roote, and thrusting in of a stone, or a wooden wedge. Also, if you water your trees with wyne that is old, it greatly auayleth (as they say) both for the fruitfullnesse, and pleasauntnesse of the frute. Of the tree decaye by reason of the great heate of the Sunne, you must rase the earth about it, and water the rootes euery night, setting by some defence against the Sunne. To cause their fruite to be quiettly ripe, you must wette the litle rootes with Vineger and vyne that is old, coueryng them againe with earth, and oft digging about them.

When trees
beare not, or
hold not
their fruite,
a remedy.

The urine of men, if it be kept thre or foure monethes, dooth wonderfull much good to plantes; which if you vse about Chies of Apple trees, it dooth not onely bring you great increase, but also geueth an excellent taste & sauour, both to the fruite and the

Shall bring o
the most
4 monthes
of the best
fast.

The second Booke entreatynge

wine: you may also vse y^e mother of oyle, such as is without salt, to the same purpose, which both must speedely be v^sed in winter.

THRA. We see that frostes and mystes, doo often tymes great harme to trees, haue you any reime^y agaynst it?

*Remedies against
frosted and
mysted.*

MARIVS. Against frostes and mystes, you must lay by round about your Dycharde, little fagottes made of stalkes, rotten bowes, or strowe, whiche when the frostes, or mystes, arise, may be kindled, the smoke whereof auoydeth the daunger. You must haue also drie boung amongst your Tynes, whiche when the frost is great, you may set a fyre: the smoke whereof dispearseth the frost.

THRA. What if the trees be sicke, and prosper not?

MARIVS. When they haue any suche sicknesse, they vse to powre vppon the Rootes, the lees of wine mingled with water, and to sowe Lupines rounde about them. The water also wherein Lupines haue been sodde, powred round about, is very good (as Plinie saith) for Apple trees.

*Remedies against
wormes and
tal or pillers.*

THRA. Trees are often tymes also hurt with woormes. *MARIVS.* If your trees bee troubled with woormes, there are diuers remedies, for the iuyce of Wormewood destroyeth the Caterpillers. The seedes, or grapne, that are steeped in the iuyce of Sengreene, or Houselecke, are also safe from any woormes: also Ashes mingled with the mother of Oyle, or the skale of an Ore, medled with a third part of vineger. Whereouer they say, that the trees that are smoked with Brimstone, or Lynie, are safe from hurtfull vermine: Galbanum likewise burnt vpon the coles, driues them away. The blades also of Garlicke, the heades being of, so burnt (as the smoke may passe through the Dycharde) dooth destroye the Caterpillers: some mingle Soote with the seedes, and sprinkle them with water: *Democritus* writeth, that a woman in her vncleanesse, bngirt, and her Heate hanging about her shoulders, if she goe bare foote round about the place, the Caterpillers will presently fall: but perhappes I trouble you with this tedious, or long discourse of hearbes, plantes, and trees, and therefore though there be much more to be spoken of, lest I should seeme to ouer weery you, I will make an ende.

THRA.

THE A trouble: no, you haue done mee a singular great pleasure, in declaring vnto me the right ording of a Garden, and an Orchard, whiche (not throughtly entreated of by others) you haue briefely, and perfectly, to our greate commoditie described. And wherreas you haue largely spoken of our Trees at home, it remaineth for you to say somethyng of the disposing of Wooddes. It was my chaunce to passe yester day, by a greate Wood of Oakes, and Coppisse, planted in very good order, and hard by, a Wyllowe groue vpon the side of a Riuer, excellently well ordied, where the Feedes were enclosed round about with great Fences, whiche greatly beautifieth your dwelling, and peeple (I warrant) no small profyte: I therefore greatly desyre to heare some thing of this part of husbandry.

MARKE. Though it be without my covenant, and that you demaunde more then I promised, yet since you force mee, I will not refuse it, least you shoulde thinke I would faile you in any thing. As touching Woods, *Ancus Martius* (as *Petrus Crinitus* writeth) was the first in Rome that euer dealt in them: the olde Fathers had alwaies a speciall regard of Woods wherfore *Virgil* sayth:

Of Woods.

*If that of Woods I frame my song,
Woods vnto Princes doo belong:
If that of Woods I lyst to sing,
Woods may full well be seeme a King.*

It was ordayned by the Romanes, that the Consuls shoulde haue the charge of the Woods, that there shoulde no Tymber be wantyng for buldying of Houses, and Shippes, and other Tymber woorkes, both publique, and priuate. The state of *Venis* at this day, obserueth the same order, pointyng a priuate officer for their Wooddes, who hath in charge as well to see to the peertly plantyng of them, as to let that there bee wantyng no Timber for their necessary vles. The Woodde that you tolde mee you passed by, is of Oakes, Beeches, and other Harte trees: some part seruing for Timber, and other for Fowell. Of these therefore will I first beginne to speake, and then of Wyllow Groues and Wyllowes, some of them be wyld, and grow of them selues, not needyng any looking to, but suche as daylie experience

The second Booke entreating

experience shewes, are nothing so good, as those that are plan-
 ted. Woodes and Forestes, doe chiefly consist of Oke,
 Beeche, Fyre tree, Vyche, Pine, Pitche tree, Hallowme,
 Corke, wilde Olive, Medlar, Crabbe tree, Juniper, Cor-
 nel, and Spiry: other Woodes haue other trees, accordyng
 to the nature of the ground. The greates Wood of Hartswald
 in Germany, as it runneth through diuers Countreys, bea-
 reth in some place onely Oke, in others Beeche, in others
 Fyres. The Forest of Ardenne for the most part beareth Oke:
 Montiscello, Larch, Fyre, Cornel, and Camarite. Monte D.
 S. Gothardo, great abundance of Chestnut trees. These wylder
 sort, though they growe of them selues, may yet well be plan-
 ted, if you haue meete grownde of the Acome, and the Berty:
 eache of them liketh some one kinde of grownde better then an
 other; as first Theophrastus, and after Plinie hath declared. In
 the mountaines delighteth the Fyre tree, the Cedar, the Larch,
 the Pitche tree, and suche as beare Rosmarie: as also the Holme,
 the Terebinth, the Chestnutte, the Hallowme, the Oke, the
 Beeche, the Juniper, the Cornel, and the Dogge tree: though
 some of these also prosper well yenough in the playne. The
 Fyre, the Oke, the Chestnutte, the Fyrebeeth, the Hallow-
 me, and the Cornel, growe aswell in the Valley, as on the
 Mountayne: vpon the playnes you shall haue the Camarix, the
 Elm, the Poplar, the Willowe, the Wasell, the Mallnutte,
 the Vngbeame, the Hayle, the Althe, and the Beeche: You
 shall not lightly see the Plome tree, the Apple, the wilde O-
 lyue, nor the Mallnutte, vpon the Mountayne: all suche as
 growe as well in the playne, as vpon the Mountayne, are lar-
 ger and fayrer to the eye growyng in the playne, but are bet-
 ter for Tymber, and fruite, vpon the Mountayne, except the
 Pearre and the Apple, (as Theophrastus sayth): In Harrishe
 grounde delighteth the willowe, the Alder, the Poplar, and
 the Widgey. And although the moste Woodes doe spring of
 their owne nature, and accord, yet are they by plantyng labour,
 and diligence, brought to be a great deale more fayre and fruite-
 full: for as afore I tolde you, how fruite trees were nourished
 and brought vp in the Gardens, so are these wilde and fruite-
 lesse

woodes growe
in mountaynes.

woodes growe
in playnes.

woodes growe
in marshes.

Nota!

lesse trees, set and planted for Tymber and Fewell. He that is disposed to plant a Woodde, must first, accordyng to his soyle, chioose his settes: and if he haue them not springing of his owne, let hym make an Imye Garden of the seedes, enclosing well the grounde with Hedge, Rammyre, or Dytche, lesse Sheepe, Goates, or any other cattell, come in to byte and brouse it: for what soeuer they haue once bitten (as if it were infected with a deadly poyson) perisheth: and therefore those that meane to plant Woods, eyther for Tymber, Fewell, or Mast, must carefully prouide agaynst these hurtfull enemies. The Countrey lawes haue therein well prouided, that where suche Springes are, they shall feede no Goates, nor suche cattell. Amongest the Mast trees, and suche as serue for Tymber, the first place of right belougeth to the Oke, called in Greeke *Αευ*, in Latine *Quercus*, in Italian *Quercia*, in Spanishe *Roble*, in French *Chesny*, in Dutche *Eichenbaum*, he that will then plant an Oke Grove, must prouide hym of ripe Acornes, not ouer dyled, nor fawtie, or any way corrupted: these must be sow in good ground, well tyllid, with as greate carefulnesse as he plantes his Dycharde, and well enclose it, that there come no cattell in it: whiche (when they be something growen) you must about February remooue to the place where you entende to plant your Wood: if you cut and moyne them, it is thought they will prosper the better for Mast: but if you reserue them for Tymber, you must not touche the tops, that it may runne by the straighter, and higher. In remoouyng them, you must make your trenches a foote and a halfe deepe, coueryng the Rootes well with earth, takyng good heede you neyther bruse them, nor breake them: for better you were to cutte them. The Oke agreeth well yenough with all maner of grounde, but prospereth the better in Marshes, and watry places: it groweth almost in all grounds, yea euen in grauell and sande, except it bee ouer dry: it lyketh worst a fatte ground, neyther refuseth it the Mountaine. Wee haue at this day an Oke in *Westphalia*, not farre from the Castell of *Alsenan*, whiche is from the foote to the neereft bowe, one hundred and thirtie foote, and thre elles in thickeesse: and another in an other place, that beeyng cutte out, made a hundred

Mast trees.

The Oke.

Quercus

ofe likeh
best y^e moorish
grounde.

it requireth no fat
grounde

— 130 foote high
without bowe

The second Booke entreating

hundred Mayne loades: not farre from this place, there grew
 an other Oke of teime yardes in thickeſſe, but not verie hye:
 the Rowers in Germany, were woont to uſe for their Ships,
 hollowed trees, whereof ſome one (as *Plinie* ſayth) woulde car-
 ry thirtie men. The next amongſt the Maſt trees is the Beech,
 in Greeke *φύλδος*, in Latine *Fagus*, in Italian *Faggio*, in Spa-
 niſhe *Haya*, in Frenche *Faus*, in Dutch *Buchen*, planted almoſt
 after the ſame manner that the Okes bee. The Maſtholme, in
 Greeke *ελειος*, in Latine *Ilex*, in Italian where it is better
 knowen *Elce*, in Spaniſhe *Enzina*, in Frenche *Hauſſen*: it
 groweth hye, if it haue a ground meete for it: it proſpereth vpon
 hillies, and likes not the playne: it beareth Acornes leſſer
 then the Acornes of the Oke, a leafe like a Baye, and is conti-
 nually greene. The like hath the Corke tree, in Greke *πεμοσο*
 in Latine *Suber*, in Spaniſhe *Alcornogue*, in Frenche *Liege*,
 whiche is counted amongſt thoſe that beare Maſt, the barke
 whereof we occupie, for the ſtokes of our fiſhing nettes, and in
 Pantofels for Winter: all other trees (ſaving onely the Corke)
 if you ſpoyle them of their barke, doo dye. An other Maſt bea-
 ring Oke there is, called in Greeke *ελις*, in Latine *Quercus*
filueſtrum, in Frenche *Cheſne*, a kinde whereof ſome thinke the
 Cerre tree to be, called in Latine *Cerrus*, growing in wilde and
 barrayne places. There are ſome that doo number the Cheſt-
 nutte tree amongſt the Maſt bearers: but of this I haue ſpo-
 ken befoze. The beſte Maſt is the Oke Maſt, the next the
 Beeche and the Cheſtnutte, then the wilde Oke. &c. all verie
 good and meete for the ſattynge of Cartell, ſpecially Hogges.
 The Oke Maſt, or Acorne, maketh thicke Bacon, ſounde
 fleſhe, and long laſtyng, if it bee well ſalted and dried: on the
 other ſider, Cheſtnuttes and Beeche Maſt, make ſweete and de-
 licate fleſhe, light of digeſtion, but not ſo long laſtyng. The
 next is the Cerre tree, that maketh verie ſounde and good fleſh:
 the Maſtholme maketh pleaſant Bacon, ſayre, and weyghtie:
Plinie ſaith, that it was ordayned by the lawe of the twelve Ta-
 bles, that it ſhould be lawfull for any man to geather his owne
 Maſt, falling vpon the ground of his neighbour, whiche the E-
 dict of the cheefe Juſtice dooeth thus interprete: that it ſhall bee
 lawfull

Beech wood.

ye Maſtholme

Maſt, and his
 differences.

ye Cerre tree.
 ye Maſtholme

lawfull for hym to doe three dayes togeather, with this prouiso,
 that he shall onely geather the Acornes, and doo no harme to his
 neighbor, as *Vlpianus* witnesseth. *Glans Mast* (as *Caius* saith)
 is taken for the fruite of all trees, as *Αγκόδιον* signifieth with
 the Greekes, though properly *Αγκόδιον* be those fruits that are
 shelde, as Nottes, and suche other. Uppon these Mast bearers
 there groweth also the Gall, in Greeke *κικκ*, in French *Noix*,
de Galle, in Italian and Dutche, as in Latine, in Spanishe *A-*
galla, a little ball, rugged and vntuen without, whereof some be
 massie, some hollaw, some blacke, some white, some bigge, some
 lesser. It groweth (as *Plinie* saith) the Summe rising in *Gemini*,
 comming all out suddenly in one night: in one daye it wareth
 white, and if the heate of the Summe then take it, it wythereth:
 the blacke continueth the longer, and groweth sometime to the
 bignesse of an Apple: these serueth beste to currie withall, and
 the other to finishe the Leather, the woorst is of the Oke: and
 thus of suche trees as beare Mast. Now wyll I ioyn with all
 the principallest of the other trees, to make vp your Wooddes,
 amongst whiche are the Elme, and the Willowe: the Elme in
 Greeke *ἰλέα*, in Latine *Ulmus*, in Italian & Spanishe *Olmo*,
 in French *Orme*, in Dutch *Vimbaum*, and *Tsienholtz*: the plan-
 ting whereof, because it is to greute vse, and easily growes, wee
 may not let passe: fyrst, because it groweth well with the Vine,
 and ministreth good foode to Cattell: secondly (as it is all harte)
 it maketh good tymber. *Theophrastus* and *Plinie*, doo both af-
 firme the Elme to be barren, peradventure because the seede
 at the fyrst comming of the leafe, seemeth to be hyd among the
 leaues, and therefore it is thought to bee some of the leafe (as
Columella affirmeth.) He that will plant a Grove of Elmes,
 must rather the seede called *Samara*, about the beginning of
 Marche, when it beginneth to waxe yallowe, and after that it
 hath dried in the shadowe two dayes, sow it verrie thicke, and
 cast fine sifted mould vpon it, and if there come not good store of
 Rapne, water it well: after a yeere you may remoue it to your
 Elme Grove, setting them certayne foote a sunder. And to the
 ende that they roote not too deepe, but may be taken vp agayne,
 there must be betwixt them certayne little trenches, a foote and
 a halfe

ye gall tree?

The Elme.

to make a groue
of Elmes.

The second Booke entreatyng

Bullorbes downe
whose y^e beare
seed as the male
trees.

Ash groues,]

y^e ashe groweth
very fast.

No februo

Nota bene

Birch for doth
prospere in gravelly
& barren ground

The Pine.

a halfe distance : and on the roote you must knitte a knotte, or if they be very long, twyst them like a Garlande, and beeyng well joyned with Boslockes downe, set them, and treade in the earth round about them. The female Elmes are better to be planted in *Autumne*, because they have no seede : at this daye in many places, cutting of settes from the sayrest Elmes, they set them in trenches, from whence when they are a litle growen, they geather like settes, and by this dealing make a greate gayne of them : in the like sort are planted Groves of Ashes. The Ashe in Greeke *μελιν*, in Italian *Fraxino*, in Spanishe *Fresno*, in French *Fraisne*, in Dutche *Eschen* : the Ashe delighteth in ritche and moyst ground, and in playne countreyes, though it growe well penough also in dry groundes, he spreadeth out his Rootes very farre, and therefore is not to be set about Conue ground, it may be selled euery thirde or fourth yeere, for to make stapes for Vines. The Ashe groweth very fast, and such as are forwarde are set in February, with such young plantes as come of them, in good handsome order standyng a rowe : others set such Ashes as they meane shall make supporters for Garden Vines, in trenches of a yeere olde, about the Calendes of Marche : and before the thirtie sixth moneth they touch them not with any knife, for the preseruyng of the Branches : after euery other yeere it is pruned, and in the sixth yeere toynd with the Vine : if you vse to cutte away the branches, they will growe to a very goodly heyghe, with a rounde bodye, smooth, playne, and strong : *Plinie* whiteth of experience, that the Serpent dooth so abhorre the Ashe, that if you enclose fyre, and him with the branches, hee wil rather run into the fire, then goe through the bowes. Birch, called in Greeke *σύνδα*, in Latine *Betula*, as *Theophrastus* whiteth in his fourth booke, is a tree very meete for Woods : it prospereth in colde countreyes frosty, snowie and grauely and in any barraine ground, wherefore they vse in barrayne groundes, that serue for no other purpose, to plant Byrches : it is called in Italian *Bedolla*, in Dutche *Byrken*, in Frenche *Beula*, Pine Woods, Fyr Woods, Pytch tree, and Larsh, are common in Italy about Trent. The Pine tree in Greeke *πίνε* or *πίτρυς*, in Latine *Pinus*, in Italian & Spanishe *Pino*, in Dutche *Hartzenbaum*,

baum, is planted of his kernells, from October to January: in hotte and drie countreyes, and in colde and wette places, in February or March: the kernelles must be geathered in June, before the clogges doo open, and where you lyst to sowe them, either vpon hilles or else where: you must first plowe the ground and cast in your seede, as ye doe in sowyng of Corne, and couer them gently with a light Harrow or a Rake, not couering them aboue a hand broade: you shall doo well, if you lay the Kernells in water thre dayes before. The kernells of the Pine are called in Greeke Σοφύλος and κονος, in Spanish *Pinoxes*. The Fyre tree in Greeke Ελάτη, in Latine *Abies*, in Italian *Abete*, in Spanishe *Abeto*, in Dutche *Deawen*, loueth not to haue any great adoo made about it: if you be too curious in plantyng of it, it will growe (as they say, the worse, it growes of his owne kernell in wild mountaines, plaines, or any where. The Pitch tree, in Greeke Πίτυς, in Latine *Picea*, in Italian *Pezzo*, in Spanish *El pino de que se baze la pax*, in Dutch *Rododemem*, is a Tree of the kind of Pines, and very like to the Pine, sweating out his Rozen as he doth: for there are sixe kindes of these Rozen trees, the Pine, the Pitch tree, the wylde Pine, the Fyre, the Larch, and the Carre tree, the plantyng of them al is alike. The Alder, a tree also meete for woods, in Greeke, κλάδρα, in Latine *Alnus*, in Italian *Auno*, in Dutch *Elfen*, in French *Aulne*, it groweth in plaine and marishe places neare to Riueres. *Theophrastus* saith, it yeeldeth a fruitfull seeds in the ende of Sommer: many places are commodiously planted with Poplar, whereof there are two sortes the white called in Greeke λεύκα, and the blacke Αίειρος: the white is called with the Italians *Populo bianco*, with the Spaniards *Alamo blanco*, the blacke of the Italians, *Populo negro*, of the other *Alamo negrillo*, in French *Peuplier*, in Dutch *Peppelen*, it is planted of the branches and settes, and delighteth in watry places, or any other ground it proueth very fast: the blacke hath the ruggedder barke, his leaues round while he is young, and cornered in his age, white vnderneath, and greene aboue. The timber hereof is good for buyldinges, specially within doores: his Wood is whitish within, and the rinde blackish, whence he hath his name, *Theophrastus* addeth a third kinde

Fyre trees.

The Pitch tree.

The Alder.

Poplar, white and blacke.

The second Booke entreating

All Wyllowes.
do delight in
marish grounde

Quintus +
figura, Quere
folio 71,

Olyar.

Nota.

kinde called in Greeke *negus*, whiche some call the Poplar of *Libya*, and of the *Alpes*, it hath a rugged barke like the wilde *Perry*, a leafe like *Iup*, and is in colour like a darke *Greene*, sharpe at the one end, and broad at the other. The blacke Poplar groweth in greate plenty aboute the lower partes of the *Rhyn*, though *Homer* call the *Willowe* a fruitelesse Tree, because his fruite turneth into *Cobwebs* before they be ripe: yet is the soueraintie giuen hym amongst *Wooddes* that are usually selde. *Cato* geueth the thirde place of husbandry groundes to the *Willowe*, preferring it either before the *Olyue* *Greue*, *Corne* ground, or *Meddow*, for it is apter to be cut, and groweth the thicker, neyther is there so greate gayne with so little charge in any thing it delighteth in watry groundes, darke and shadowy, and therefore is planted about *Riuers* and *Lakes*, howbeit it groweth in the *Champion*, and other groundes: it is planted of young settes, a foote and a halfe long, and well couered with earth: a wette ground requireth a greater distance betwixt them, wherein you shall doo well to set them fife foote a sinder, in order like the *Sinke* vpon a *Dye*: in the drie ground they may be sette thicker together, yet *Columella* would haue them fife foote distaunce for passyng by them. There are twoo sortes of *Wyllowes*, one sort enduring for ever, called *Olyar*, seruing for making of *Baskets*, *Chayres*, *Hampers*, and other country stuffe: the other kinde growyng with greate and high *Branches*, seruing for staves to *Vines*, or for *Quickettes*, or *Stakes* of *Hedges*, and is called *Stake Wyllowe*: it is planted both of the twygge and of the stake, but the stake is the better, which must be set in a moyst ground well digged, two foote and a halfe in the ground before it spring, and when the twygges are bare, you must take them from the tree when they bee verie dry, otherwise they prosper not so well: these *Stakes* or *Settes* being taken from the young stocke, that hath been ones or twise cut, and in thicknesse as much as a mans *Arme*, you muste set in the ground three foote, or a foote and a halfe deepe, and fife foote a sinder, laying good moulde aboute them, fence them well, that there come no *Cattell* to pill of the barke of them. After three or foure yeeres you may pull them, whereby they will growe,

growe and spreade the better, and so you maie continually cutte them euery five, or so werth yere, whereof you maie make setts for plantyng of more, for the old ones are not so good to bee occupied. The tyme of cuttyng of them, is from the fall of the lease vntill Aprill, the Moone encreasyng, and in Westerly, or Southerly winde: for if you dooe it, the winde being in the North, wee finde by experience thei will not growe so well: you muste cutte them cleane awaie, that the olde braunches hurte not the young sprynges: some thinke the young Willowe to growe the better the nearer the grounde, and the smooother he is cut. The Oslar commonly groweth of his owne self, and is also planted of his rodde, in waterie and marishe groundes, the earth raised vp, and laied in furrowes: it is planted and sprynges moste plentifully, where the earth is beaten vp with the rage and ouerflowynges of the water: it serueth as a sure defence for making of Bankes and Walles in Marches, and that cheefly in Marche, the Moone encreasyng: the Oslar maie bee cut euery yere, or euery twoo yere if you will. Ioe, here haue you concerning Wooddes, what needefullest are for our countriemen to plant: for as for Wooddes of Cedar, Cipresse, and other strange Trees, it is not for our Housebandes to busie them selues about: wette and riche groundes that are meete for corne, is also good to bee planted with Okes, Beeche, Willowe, and Poplar, although the Oke and the Beeche refuse hillie, and lighter grounde: Sandie, and barraine groundes, are good for Birche, Bramble, Broome, and Hethe, as I haue sufficiently saied before. Now perhaps you would haue me proceade with Coppisse wooddes, that are continually to be feld.

THRA. I would, if it were no paine to you.

MARIVS. Coppisse, or sale wood, were firste brought vp (as Plinie saith) by *Qu. Martins*. This kinde of Woodde groweth commonly of his owne accorde in Forrestes, and wattrie places: but all Wooddes are not for this purpose, for some Trees there are, whiche if you cutte and poule often, will fade and dye, as the Ashe, the Juniper, the Cherie, the Firrhe, the Apple, and the Pirrie: and some againe, if thei be not cutte, will perishe: the Time requireth perely cuttyng, the Oliue, the Dir-

D. J.

test,

For plantyng
of Oslars.

Birthe Broome
will growe
in sandy ground

The second booke entreatyng

tell, and the Pomegranate, eche other yere. In cuttyng of them (as thei are diuers) so is their order: for the Dke, as he groweth slowlie, so is he not to be cut, before he bee of seuen, or eight yeres growth: and the nearer the grounde you cut hym, the better he growes, though he maie be polled seuen or eight foote aboue the grounde: The like is of the Beeche, sayng that he maie sooner bee cut. The greate Willow, and the Poplar, are cut after one sorte, as I shewed a little before: though the Osier maie bee cut euery twoos yere, or euery yere. The Chestnut maie be felde euery seuenth yere, bothe for Fewell, or for Fine stauces. Trees are cut and polde sondrie waies, for either thei are felde close by the grounde, or the bodie is polde, when it comes to be of the bignesse of a mannes arme, or more, as the Willow is. Coppilled Wooddes are commonly seuered into so many parcels, as maie serue for verely fellyng, some still growing while others are a fellyng, and because some of them grow faster then other some, euery sort hath his place, and his season appointed. Some are felled euery sowerth yere, some euery fift yere, as the Willow, the Poplar, the Alder, and the Birche: some, once in seuen yere, as the Chestnut, and some in more, as the Dke. It remaineth, that I now shewe you the maner of fellyng of timber, and what timber is meetest for euery woork.

THRA. I haue a greate desire to heare what tyme is meetest for fellyng of Timber, whiche muche auaieth (as thei saie) to the long enduryng of it: after, I would know what timber is meete for euery purpose.

MARIVS. The season of fellyng, no doubt is to great purpose, whether it bee for Timber, or Fewell: for suche trees as are felde either in the Spring, or in Sommer, though thei seeme drie without, are notwithstanding full of moisture, and weatnesse within, whiche in burnyng, will neuer make good fire: and therefore for Coppisse and fire Woodde, your best fellyng is in Winter: and for buildyng, it is beste cuttyng of your Trees in December, and Januarie, the Goone beeyng in the wane, from the twentie, to the thirtie daie. Yet are there some that saie, thei haue founde by experience, that Trees beeyng cut in Januarie, are full of Sappe: and therefore thinke it bet-

ter either to cut them before, or after. *Cato* saith, the best tyme is aboute the twelfth of December, for the Timber Tree that beareth fruite, is beste in season when his seede is ripe, and that whiche hath no seede, when it pilles it is tyme to cutte. Suche as are flawed, seruyng for Pillers of Churches, or other round woozkes, must bee cutte when thei spring: Shingles, and suche as the Hatchet muste flawe, are to bee cutte betwixte midde Winter, and the begynnynge of the Westerne Windes. *Plinie* affirmeth the beste season for fellyng of timber, to bee while the Moone is in coniunction with the Sunne. *Vitruius* an excellent fellowe in buildyng, doeth will you to fess your timber fro the begynnynge of *Autume*, till the tyme that the westerne windes begin to blowe, the whiche windes begin to blowe (as *Plinie* saith) about the sixt Ides of Februarie: for in the Spring, all Trees are as it were with child, and bende all their force to the puttyng out of their leafe, and their fruite. Since then thei bee Sappie, and not sounde, by the necessitie of the season, thei are made by the reason of their loosenesse feeble, and of no force: euen as the bodie of women, after thei haue conceived, from their conception, till the tyme of their deliuerance, are not iudged to be sound, or persite. In like sort the Trees in *Autume*, when the fruite and leaues begin to fall, the rootes drawyng from the earth their sufficient sustenaunce, are restored againe to their old estate: beside, the force of the aire in Winter dooeth fasten and make sounde the Trees, and therefore is it then thought the beste tyme to fess your timber. The maner of cuttyng of it is this, first to cut it till you come to the middle of the pithe, and so to let it stand, that the Sappe that is in it, maie descend and droppe out: so shall not the moisture within putrefie, nor corrupt the timber, but passe clearly awaie. When you haue cutte it, and you see it drie that it hath left droppynge, you maie cutte it doune, and so shall you bee sure it shall beste serue your turne. There are some maisters in buildyng, that thinke it best after you haue sawen out your timber in boordes, to laie them in water for three or fouer daies, or if thei bee of Beeche, for a longer tyme, eight or niene daies: and beyng ordered in this wise thei shall neither (thei saie) be rotten, or woozme eaten.

Nota

The second booke entreatyng

to what vse the
wood most apply
doth serue.

THE *A.* Now let vs heare what trees are best for timber.
MARIVS. There are diuers and sondrie vses of timber: suche as are barrain, are better then the fruitfull, excepting those sortes where the male beareth, as the Cipresse, and the Cornell: in all Trees the partes that growe toward the North, are harder, and sounder, whiche are almost couered with mosse, as with a cloke against the colde: the worst are those that growe in shadowie and watrishe places, the massier and better during are thei that growe againste the Sunne: And therefore *Theophrastus* deuideth all timber into three sortes, into clouen, squared, and rounde, of whiche the clouen doe neuer rent nor coame: for the piche beeyng bared, dzieth by and dieth: thei also endure long, because thei haue little moisture. The squared, and the rounde, of the whole timber, dooeth coame and gape, specially the rounde, because it is fuller of pitch, and therefore renteth and coameth in euery place. And suche hpe Trees as thei vse for pillers, and maine postes, thei first rubbe ouer with Bullockes dung to season them, and to sucke out the Sappe: for the moisture dooe alwaies come sooner then the drie, and drie better to bee sawed then the greene, excepte the Dke, and the Bore, that doe moze fill the teeth of the Sawe, and resist it. Some againe refuse to bee glued either with them selues, or any other, as the Dke, whiche cleaueth as soone to a stone, as any wood, neither doe thei well cleaue, but to suche as are of like Nature: to be bozed, the greene is woosier then the drie: the light and the drie, are harder to be cut: for bandes and wiches, the Willowe, the Broome, the Birche, the Elme, the Poplar, the Vine, the clouen Reede, & the Bramble are best: the Hasel will also serue but the first is the Willowe: thei haue also a certaine hardnesse and fairenesse, mete to be vled in grauen workes. Among those that serue for timber, are moste in vse the Firche, the Dke, the Pine, the Larthe, the Elcle, the Elme, Willowe, Cedar, Cipresse, the Bore, Birche, Planetree, Alder, Ashe, wilde Dke, Datetree, Beeche, wilde Olive, Bastholme, Walnut, Haple and Holly, and diuers others, vled accordyng to their nature, and the maner of the countrie where thei grow. The Firre tree whereof I haue also spoken befoze, giueth out Rozine, and his
timber

timber is meete for diuers woorkes, and greatly esteemed for his height and bigneſſe, whereof are made the Shippe Maſtes, and Millers for houſes: For it is verie ſtrong, and able to abide greate force. It is uſed alſo in buildyng, for greate Gates and Dooze poſtes: in fine good for any buildyng within, but not ſo well enduryng without doozes, and very ſone ſette aſire. They uſed (as *Theophrastus* ſaith) in the olde tyme to make their Gallies and long Boates of Firre, for the lightneſſe ſake, and their ſhippes for burden, of Pine tree, and Oke. Of Oke, I haue ſpoken a little before, the timber whereof is beſte, bothe for inwarde buildynges, and for the weather, and alſo well enduring in the water: *Hefiodus* would haue yokes made of Oke. The wilde Oke ſerueth alſo well in water woorkes, ſo it bee not neare the ſea: for there it endureth not, by reaſon of the ſaltneſſe: it will not be pearced with any Augur, except it be wette before: neither ſo will it ſinſer (as *Plinie* ſaith) any Naille driuen in it, to bee plucked out againe. The Maſſholme in Greeke *πευκος*, a Tree well knowen in Italie, the Woodde whereof is tough and ſtrong, and of colour like a darcke redde, meete (as *Hefiodus* ſaith) to ſerue for plow ſhares: it maie alſo be made in Clainſcot, and Payle boorde. The Larſhe Tree in Greeke *λόγισ*, in Italian *Larice*, in Dutche *Lerchenbaura*, was in the olde tyme greatly eſteemed about the riuer *Poe*, and the Gulfe of *Veniz*, not onely for the bitterneſſe of the Sappe, whereby (as *Virruius* ſaith) it is free from corruption and wormes, but alſo for that it will take no fire, whiche *Mathiolus* ſeemeth with his argumentes to confute. It is good to ſuſtaine greate burdens, and ſtrong to reſiſt any violence of weather, howbeit thei ſaie, it will rotte with ſalte water. The Eſcle is a kinde of Oke, called in Greeke *ελατὶν πύλλος*, in Latine *Eſculus*, is ſone hitte with any moiſture: the Elme, the Willowe, and the Poplar, whereof I haue ſpoken before, will very ſone rotte, and corrupt: thei will ſerue well yenough within dooze, and for making of Hedges. The Elme continueth very hard, and ſtrong, and therefore is meete for the cheekes and poſtes of Gates, and for Gates, for it will not bowe, nor warpe: but you muſt ſo diſpoſe it, that the toppe maie ſtande downeward: It is meete (as

The Fyre.

The Maſſholme.

The Larſh. *Larix*
neg. putrefit
net britur.

Ulmus

D. iij.

Hefiodus

1511 B 117

The second booke entreatyng

Hesiodus saith) to make plowe handles of. The *Alhe* (as *Theophrastus* saith) is of twoo sortes, the one tall, strong, white, and without knottes, the other more full of *Sappe*, ruggedder, and harder. The *Baie* leafe (as *Plinie* saith) is a poison to all kinde of Cattell: but herein he is deceiued, as it should appeare by the likeliness of the name, for *μῖλος* or *σμίλας* is the yong Tree, whose leaues (as is certainly tried) killeth all suche beastes as chawe not the cudde. *Alhe*, besides his manifold vse otherwaies maketh the beste and fairest horsemenmes staues, whereof was made the staffe of *Achilles*, whiche *Homer* so greatly commen- deth: it is also cutte out in thinne boordes. The *Beeche*, where- of I haue spoken before, although it bee hyttle and tender, and maie so bee cutte in thinne boordes and bent, as he seemeth to serue onely for Caskettes, Boxes, and Coffers, his colour bee- yng very faire: yet is he sure and trustie in bearyng of weight, as in *Arel* trees for cartes, or waines. The barke of the *Beeche* was vsed in the old tyme, for vessels to gather Grapes in, and other fruite, and also for Cruettes, and vessels to doe sacrifice withall: and therefore *Cirius* sware, that he brought nothyng awaie of all the spoile of his enemies, but one poore *Beechen* Cruet, wherein he might sacrifice to his gods. The *Alder* is a Tree with a streight bodie, a soft and reddishe wood, growyng commonly in the watrye places, it is cheefly esteemed for founda- tions, and in water workes, because it neuer rotteth lyng in the water; and therefore it is greatly accounted of among the *Venitians*, for the foundations of their places, & houses: for be- yng driuen thicke in piles, it endureth for euer, and sustaineth a wonderfull weight. The rinde is plucked of in the Spring, and serueth the *Diar* in his occupation: it hath like knots to the *Ce- dar*, to be cut and wrought it. The *plane* tree is but a stranger, and a newe come to *Italie*, brought thither onely for the com- moditie of the shadowe, keepyng of the Sunne in Sommer, and lettynge it in in Winter. There are some in *Athens* (as *Plinie* saith) whose branches are 36 cubites in breadth: in *Lycia* there is one for greatnesse like a house, the shadowe place vnderneath containyng 81 foote in bignesse: the timber with his softnesse hath his vse but in water, as the *Alder*, but drier then the *Cume*,
the

Alder Tree.

Plane tree is best
for shadowe

the Ashe, the Bulberie, and the Cherie. The Linder, in Greke
 Φιλυρα, and so in Italian, in Spanishe *Laterra*, in Dutch *Lyn-*
den: this tree *Theophrastus* counteth best for the woorkeman,
 by reason of his softnesse: it breedeth no woornes, and hath be-
 twixt the barke and the wood, sondrie little rindes, wherof thei
 were wont in *Plinie* tyme to make Ropes and withes. The
 Birche is very beautifull and faire: the inner rinde of the Tree
 called in Latine *Liber*, was vsed in the old tyme in steade of pa-
 per to write vpon, and was bound vp in volumes, whereof bo-
 kes had first the name of *Libri*, the twigges and bowes be final
 and bendyng, vsed to bee carried before the Magistrate among
 the Romanes, at this daie terrible to poore boies in Schooles.
 The Elder Tree, called of *Dioscorides* Ακτιν, in Latine *Sam-*
bucus, in Italian *Sembuco*, in Spanishe *Sanco*, in Frenche *Sm-*
seau, in Dutche *Hollenter*, doeth of all other trees soonest and
 easeliest growe, as experience besides *Theophrastus* doth teache
 vs, and though it be very full of pitch, yet the wood is strong and
 good: it is hollowed to diuers vses, and very light stauies are
 made of it. It is ströng and tough when it is dry, and being laide
 in water, the rinde commeth of as soone as he is drie. The El-
 der wood is very hard and strong, and cheefely vsed for Bare
 speares: the roote (as *Plinie* sayth) maie be made in thime boor-
 des. The Figge tree, is a tree very well knowen and fruitfull,
 not very hye, but, but somewhat thicke (as *Theophrastus* sayth)
 a cubite in compasse, the tymber is strong, and vsed for many
 purposes, and sith it is soft, and holdeth fast what soeuer stickes
 in it, it is greatly vsed in Targettes. Bore tree, in Greeke
 πυρος, in Italian *Boxo*, in Spanishe *Box*, in Frenche *Bonys*, in
 Dutch *Bustbaum*, an excellent tree, and for his long lastyng, to
 be preferred before others. The Box that turned is, saith *Vir-*
gil Junipe, called bothe of *Theophrastus* & *Dioscorides* Αενδις, *Iuniper*,
 because it driueth awaie vermine: for with his sauor, *Todes* and
Snailes, and suche like, are driuen awaie, in Latine it is called
Iuniperus, in Italian *Ginipro*, in Spanishe *Euebro*, in Frenche
Genenre, in Dutch *Wacholder*: it is very like to Cedar, but that
 it is not so large, nor so hye: though in many places it groweth
 to a greate height: the timber wherof will endureth a C. yeres.

Filia:

Liber

Sambutus

Ficus

Iuniper

The second booke entreatyng

Juniper walbe
kepe fire
very longe

The Cedar.

The Cypresse.
The Pine.

The Wal-
nutte tree.

The wylde
Olyue.

The Holly.

gather holly berries
to make a greene
hedge all winter
& for them.

The Maple.

And therefore *Haniball* commaunded, that the temple of *Diana* should bee built with rafters and beames of *Juniper*, to the ende it might continue. It also keepeth fire a long tyme, in so muche as it is saied, the coales of *Juniper* kindeled, haue kepte fire a yere together: The *Summe* wherof our *Painters* vse. The *Ceder Tree*, in *Greeke* *κεδρος*, in *Latine* *Cedrus*, and almoste like in other tongues: the hardnesse of this timber is onely praised, and that it will neither rotte, nor bee woorme eaten, but continue euer. *Salomon* builde that noble Temple of *God* at *Iherusalem* of *Cedar*: It is very meete for the building of *Palaces* and *Castels*: the *Cedar*, the *Eben*, and the *Oliue tree*, doe neuer chinke nor coame. *Images* of *Goddess* and *Saintes* were alwaies made of *Cedar*, because it euer peebleth a moisture, as though it sweat. *Theophrastus* writeth of *Cedars* in *Syria*, of fower elles and more in compasse. The *Rosen* and *Pitche* of the *Cedar tree*, is called in *Greeke* *κεδρινα*. The *Cypresse*, and the *Pine*, dooe endure a long tyme without either woorme, or rottyng: *Plinie* commendeth *Eates* of fower hundred yeres olde. The *Pine* (saith *Theophrastus*) is of greate strength, and very meete for the streightnes and handsonnesse, to be employed in building. The *Walnut tree* is a greate tree, and commonly knowen, whose timber is muche vsed in seelenges and tables. *Theophrastus* writeth, that the *Walnutte tree* before he falleth, maketh a certain kinde of noise, whiche it once happened in *Antandro*, the people heeryng greatly afraied, fledde sodainly out of the *Bathes*. The wilde *Oliue*, in *Greeke* *αγριλαία*, in *Latine* *Oleaster*, in *Italian* *Oliuo Salvatico*, in *Spanish* *Azenuche*, in *French* *Oliue sauvage*, in *Dutch* *Wilder Olyboom*, of his *Woodde* is made the haftes and handles of *wimbles* and *Augurs*. *Holme*, or *Holly*, is a tree whose leaues are full of prickles round about the leafe, and the barke, beeryng bothe continually greene, the berries like the *Cedar*: of the rind of the rootes they make *Birdlime*: the *Wood* is very harde, the braunches will well winde and bowe, and therefore serueth excellent well for quickset *Hedges*: the *Dutchmen* call it *Hulsen*. The *Maple*, called *Theophrastus* *σπειδαμνος*, in *Dutch* *Masfelterbaum*, for the beautie of the wood is next to the *Cedar*, ha-

uyng

uyng a very faire and pleasant graine, of the resemblance called Peacokes tayle: with this wood tables are couered most gorgeous to the eyes, and other fine woorkes made, specially of the knobbes or wenues that growe out of it, called *Bruscon* and *Molluscon*: of whiche the knobbes hath the fairer and the more courted graine. *Molluscon* is a more open graine, and if so bee it were of sufficient breadth for tables, it were to bee preferred before the Cedar: now it is but seldome scene, and that in wytyng tables, or aboute beddes. There is also a knobbe, or a wen growing upon the Alder, but a great deale woorse then that of the Papple. The Date Tree, whereof we haue spoken before, hath a very softte woodde. The Coyke his Timber is tough: but now for a farewell, I will shewe you what woorkes euery timber is meete for. The Firre, the Pine, and the Cedar, serue for Shippes for Galleis, and Lighters, (as *Theophrastus* saith) are made of Firre, for the lightnesse sake: Shippes of burden, are made of Pine. Upon the Frenche and Germanie seas, thei cheefly vse Oke about their Shippes: the self same timber also serueth well for buildyng of houses, specially the Cedar, and the Cypress. The Firre, the Poplar, the Ash, & the Elm, are meete for the inner partes of the house, but thei serue not so well in the weather, as the Oke dooeth. For conuighaunces of water, the Alder, the Pine, and the Pitche tree, are beste made in Pipes: beynge well couered in the earth, thei laste a woonderfull while, but if thei lye vncouered, thei sooner perishe: The Oke also, the Beeche, and the Walnutte, endure very well in the water. The Timber that longest endureth, is the Oliue, the Oke, the wilde Oke, and the Bastholme: for as *Plinie* witnesseth, the Oliue hath been seen to stande two hundred yeres, and like the Cedar, and the Cypress, as hath been said before: for Rafteres and Portisse peeces, the Elm and the Ashe, by reason of their length serues beste. The beste to beare weight, is the Fyre, and the Larsh, whiche how so euer you laie them, will neither bend, nor breake, and neuer faile, till woormes consume them. Contrariwise, the Oliue Tree, and the Oke, will giue and bende, and so will the Poplar, the Willowe, the Elm, and the Birche. The Date (a woorthie Tree) bendeth vp againste his

burden

The Date tree
The Coyke.
What turne
each tumber
serues.
For Shyps.

For Houses.

For water
courses.

For bearing
of weyght.

The second Booke entreating

For Shingles.

burden. The Poplar on the other side, groweth at euery light thing. The Elm, and the Ashe, though slowly, are easily bent. These also are easily wofen and bent: the Willow, the Birch, the Broom, the Oke, and the Oken boordes, Shyngles to couer houses withall, are best made of Oke, Beech, and suche others as beare Haste: and also of suche as peeble Rozen, as the Pine, and the Pitch tree: the Pitch tree, and the Oke, serue beste for Cuppes, Tankardes, and suche like. Those that are cutte for Mainscot and thime boordes, the Cerre tree, the Terrebint, the Maple, the Bore, the Date, the Hawthorne, the roote of the Elder, and the Poplar. For the beautifying of Ta-

For Tables.

bles, serueth cheefly the Maple, the Ashe, the Walnutte, and somtimes the Cherie, and the Beare: but the preciouslest are the Cypress, and the Cedar Tables. For Axeltrees, Wheelles, and Spoakes, serueth the Oke, the Maple, and the Beeche. Virgil doeth also appoint the Cedar, & the Cypress to this vse.

For Axeltrees
Yokes, and
Plowes.

Hereof thei make the Spoakes of Wheelles, and hereof Cartes and Waines. The self same Timber also serueth (as Hesiodus saith) for Plowes, Pokes, and Wagons: but that he addeth herevnto the Ashe, and the Cerre Tree, and as the Ashe for his softnesse, so the Hawthorne for his hardnesse. For Pulles, Wimbles, Sheathes, and Ballettes, the meetest are the wilde Olive, the Bore, the Hawthorne, the Hedlar, the Elm, the Ashe, the Maple, and the Bramble: but the greater sorte of Ballettes, or Beetles, and the Wheelles, and Pulles for Milles and Welles, are made of Pine, and Walnutte Tree. Cato

For hafts, and
handelles.

would haue the Waines and Cartes made of Holly, Bape, and Elm. Hyginus would haue the handles, or steales of husbandmennes tooles, made of Dogge tree wood, Holme, Cerre tree, and whiche we haue commonly in vse (Bore. Targettes

For Targetts.

(as Theophrastus saith) made of Willow, and Elm, for being pearced, thei close the harder together: but the Willow is the lightest, and therefore the better. The Figge Tree also, and the Lindre, the Birche, the Poplar, and the Elder, serue all well for Targettes. The best wood for Horsmennes stauces is the Ashe, & (as Virgil saith) for valiant stauces, the Mirtill: the Cwe tree serueth (as the same Virgil witnesseth) for Bowes.

For chafyng
stauces.

The

The Ewe Tree for the Persian bowe thei bende.

For Gates, thei vse the Elme: for Hampers, or Backettes, all suche as easely bende. For Cupplinges and Rafteres of houses, the Elme, and the Ashe for thime boorde, the best to cleaue the Firre, the Poplar, and the Beeche: for long durynge, and abiding the weather, and standynge in water, the Dke is commended, for whiche the other serue not, saue for the water, the Beeche, and the Alder: for fire, and light, are vused the Firre, the Pitch tree, and the Pine. The best coles are made of the fastest wood, as the Dke, and the wilde Dke: but the finers rather desire the coles that are made of the Pine tree, because thei better abide the blowynge, and dye not so faste as the other. The Cerre tree, though the timber bee of no greate vse, yet serueth it well to make cole of for the Basse. Forges, because as soone as the Bellowes leaue, the fire ceaseth, and there is little waste in it: but for buildynge, the timber thereof is altogether vnprofitable, because it doeth easely breake, and moulder awaie: but beeyng in postes unhewed, it serueth well yenough within doore. The aptest to take fire, is the Figge tree, and the Oliue tree: The Figge tree, because it is soft and open: the Oliue tree, for the fastnesse and the fatnesse. The Larthe tree (as *Vitruuius* saith) resisteth the fire, though *Mathiolus* (as I saied before) goeth about to disproue it. In all the bodies of trees, as of liuely creatures, there is skinne, senewes, blood, fleshe, vaines, bones, and marowe: their skinne is their barke, of greate vse among conntrie people: the vesselles that thei gather these Olmes and other fruites in, thei make of the barke of Linde Tree, Firre, Willowe, Beeche, and Alder. The Coyke hath the thickest barke, which though he loose, he dieth not, for so beneficiall hath nature been to hym, that because he is commonly spoiled of his barke, she hath giuen hym two barkes. Of his barke, are made Pantoffels, and Slippers, and floates for fishynge nettes, and Angles: if the barke be pulled of, the wood synkes, but the barke alwaies swimmeth. The next to the rinde in moste trees, is the fat, the softest and the woofst part of the tree, and moste subiect to woormes: therefore it is commonly cutte awaie. The sappe of the Tree, is the blood, whiche is not alike all trees, for in the,

For water
woorkes.

For colynge.

The barke,

Figge.

The second Booke entreatyng

Figge Tree it is milkie, whiche serueth as a Remette for Cheese. In Cherie Trees, it is gummie: in Elmes, saltishe: in Apple Trees, clommie and fatte: in Vines, and Beare Trees, watrish: thei commonly spryng the best, whose Sappe is clammiest. The iuice of the Hulberie, is sought for (as *Plinie* saith) of the Phisitions. Nerte to the fatte, is the fleshe, and nerte to that, the bone, the beste parte of the timber: all Trees haue not any greate quantitie of this fatte and fleshe, for the Bore, the Cornel, and the Oliue, haue neither fatte, nor fleshe, nor marrowe, and very little blood: as neither the Seruissle, and Alder, haue any bone, but bothe of them full of marrowe. Reedes for the moste parte haue no fleshe at all: in fleshe of trees, there are bothe vaines and arteries, the vaines are broder, and fairer: the arteries are onely in suche Trees as will cleaue, by meanes of whiche arteries it commeth to passe, that the one ende of a long beame laied to your eare, if you do but fillippe with your finger vpon the other ende, the sounde is brought forthwith to your eare, whereby it is knowne, whether the peece be straight and euen or not. In some trees there are knottes on the outside, as the wenne, or the kernell in the fleshe of man, in the which there is neither veine, nor arterie, a hard knoppe of flesh beyng clogg, and rolled vp in it self: these are moste of pice in the Cedar, and the Haple. In some, the fleshe is quite without veines, haupng onely certaine small strynges, and suche are thought to cleaue beste: others, that haue not their strynges, or arteries, will rather breake then cleaue: as the Vine, and the Oliue, will rather breake then cleaue. The whole bodie of the Figge is fleshie: as the bodie of the Bastholme, the Cornel, the wilde Oke, the Hulberie, and suche others as haue no pitche, is all bonie. The graine that runneth ouerthwarde in the Beeche, was taken (as *Plinie* saith) in the old tynic for his arteries.

THRA. There are other commodities beside the Timber to be gathered of these Trees.

MARIVS. Aerie true: (For as I saied before) of the Medlar, the Oke, the Chestnut, the Pine, and the Beech, these Trees that growe in the wooddes, besides their timber, beare fruit also, good and meete to bee eaten. So of the Fittes, the
Pitch

Pitche Trees, and the Pines, wee gather Rozen and Pitche, to our greate commoditie and gaine: as of the Oke, the Beech, the Chestnut, the Hedlar, and the Pine, wee haue fruite bothe meete for man, and also good for feedyng of Hogges, and other tattell. In tyme of dearth, bothe our forefathers, and we, haue tried the good seruice, that Akoynes in breade hath dooen: yea, as *Plinie* and others haue writteth, thei were woont to be seru-
ued in amongst fruite at mennes Tables. Neither is it vn-
known what greate gaines some Countreies gette by Ako-
ynes, Rozen, and Pitche: The Galle also groweth vppon these
Akoyn bear yng Trees, wherof I haue spoken before. A-
mongest all the Trees out of whiche runneth Rozen, the Tar
Tree, a kinde of Pine, is fullest of Sappe, and softer then the
Pitche, bothe meete for fire, and light, whose boordes wee vse
to burne in steade of Candelles. The Cedar sweateth out Ro-
zen and Pitche, called *Cedra*. Moreover, of Trees is Birde-
lime made, the beste of the Terre Tree, the Pastholme, and
the Chestnutte, specially in the Wooddes about *Sene*, and nere
the Sea side, where thei are carefully planted in greate plentie,
by the Birdlime makers: For thei gather the berries from the
trees, and bolle them, till thei breake, and after thei haue stam-
ped them, thei washe them in Water, till all the fleshe fall a-
waie. *Plinie* affirmeth, that it groweth onely vppon Okes,
Pastholme, Skaddes, Pine Trees, and Firrhe. Birdlime is
also made of the rootes of certayne Trees, specially of the Hol-
ly, whose rootes and barks withall thei gather, and laie them
vp in Trenches, couered with leaues in a very moiste ground
(some doe it in doun) and there thei let them lye till thei rotte,
then take thei them out and beate them till thei wate clammye,
and after washe them in warme water, and make them vp in
balles with their handes, it is vled (beside other purposes) for
the takyng of Birdes. Besides all this, there sweateth out of
Trees a certayne Gumme knowen to all men, as of the Cherie
Tree, the Plome Tree, the Juniper, to Oliue, the Blacke-
thorne, the Iule, and Almonde. Out of the Juniper, commeth
Vernishe: out of the Pirrhe, Storax: out of the white Poplar,
Aniber, *Plinie* writeth, that Amber commeth out of certayne
Pine

Birdlime.

Vernishe.

Amber.

The third booke entreating

pine Trees in the fatte, as Summe dooeth from the Cherie Tree. And thus these thynges that I haue here at your request declared, touchyng the order of Plantyng and Sowpyng, I beseeche you take in good woorth: you heare my wife calleth vs to Supper, and you see the shadowe is tenne foote long, therefore it is hys tyme we goe.

THRA. I giue you moste hartie thanks, that you haue thus freendly entertained me in this your faire Orchard, with the sweete description of these pleasaunt hearbes and Trees.

IVLA. Sir, your Supper is ready, I praye you make an ende of your taske, and let the Gentleman come in here into this Arbery.

MARIVS. Come, let vs goe.

Soli Deo laus & gloria, per Christum Iesum.

The ende of the seconde Booke.



breedyng, and caryng of cattell.

Hipocorus, Euphorbus, Hedio, Enmans,



That the breedyng and feedyng of cattell is a part of Houebandrie, and nere ioy-
ned in kinrede to the ticulture of the ground, not
onely appeareth by *Virgil*, the prince of *Poe-*
tes, who hath in his *Georgicks* throughe lie
set forth the order thereof, but also by the wit-
nesse of the more aunciente *Philosophers Xenophon*, and *Ari-*
stotle. The like dooeth our common experience at home dailely
trache vs: for albeit the trade of tillage and keeping of cattell is
diuers, and the maner of occupieng many tymes contrary the
one to the other: as where the *Grasler* and *breeder*, requirerh a
ground full of grasse and pasture, the housebandman on the o-
ther side, a ground without grasse, and well tilled: yet in these
their diuers desires, there appeareth a certaine fellowship and
mutuall commoditie redoundyng in their occupieng of one the
other, whiche *Fundanius* in *Varro* doeth senie by an apt compa-
rison to prooue: as in a couple of *Shalmes*, or *Records*, saith
he, the one differeth in sound from the other, though the musick
and song bee all one (the one soundyng the treble, the other the
base) in like maner maie we terme the *graslers* trade the treble
and the *tillers* occupation the base, folowynge *Dicarchus*, who
reporteth, that at the begynnynge, men liued onely by breedyng
and feedyng of cattell, not hauieng as yet the skill of plowynge
and tilling the ground, nor plantyng of trees. Afterwardes in a
lower degree, was found out the maner of tilling of the ground,
and therfore beareth the base to the feeder, in that it is lower, as
in a couple of *Records* the base to the Treble. So this vsyng
to keepe cattell for plowynge, cariage, dounyng of our ground
and other commodities, and on the other side, to till the ground
for feedyng and maintenaunce of our cattell, it comes to passe,
that though the maner of occupieng in tillage, and keepyng of
cattell be diuers, yet one of the so serueth the turne of the other,
that (as it seemeth) they can not well bee a sonder: for without
the

The third booke entreatyng

the seruice of Housle and Dren, we can neither plow, nor doing our ground: and Chasse, Strawe, and other offall of Corne, is meete to bee spent vppon the ground, then to be sold, bothe for the Farmers behoofe, and the lordes, and better bestowed vpon the housholde cattell, then vppon the forreiners. Besides, the doing of the cattell enricheth the the ground, and bringeth great encrease: and whereas there is no place (as *Columella* saith) but in the tillage of the ground, thei haue as muche neede of cattell, as menne: the cattell serue not onely for the tilling of grounde, but also to byng in Corne, to beare burdens, carrie doing for the grounde, and also for breede, and encrease of the Stocke: wherebyp thei haue their name *Iumenta*, of helpyng, because thei helpe and further vs, either in our labours by plowpnyng, or bearing. Neither is it onely sufficient to nourishe, and bring vpp this kinde of greate Cattell called *Iumenta*, but also the other lesser sorte of beastes, as Sheepe, Swine, Goates: and of foules, Geese, Peacocks, Duckes, Pigeons, Venues, Chickinnes, and other Poultrie, and thinges belögyng to housebandrie, wherewith the good houseband, beside his owne sustenance maketh greate gaine: and if the grounde be for it, and sale a fauourable, there ariseth oftentimes as greate profite, as in sowpnyng of Corne, and that with smaller charges. For a prooffe that feedyng is gainfull, the woordes *pecunia* money, and *peculium* substance, or riches, beyng bothe deriued frö the Latine name of cattels, maie very well serue: for in the old tyme thei vsed their cattell in steade of money, and their common penalties and fines, taken in cattell, the greatest, was thirtie Dren, and twoo Sheepe; euery Dre valued at v. s. vi. d. and euery Sheepe at vi. d. the smallest was a shepe: the very like is yet obserued with the noblest and warlikest people, whose substance lieth altogether in cattell. *Cato* beyng once asked by what parte of Housebyrie a manne might soonest bee made riche, made aunswere, by Graspyng: and beyng asked againe, whiche waie he might get sufficient liuelihood, he aunswered, by meane graspyng. For euer, that the worthinesse and firste originall of keepyng of cattell is of greatest antiquitie, and that the trade thereof hath alwaies, from the tyme of the Patriarkes hether to, been counted moste

The worthi-
nesse and an-
tiquitie of kee-
ping of cattell

most honest, as well the scriptures, as prophane histories doe witness, whiche kinde of life, how acceptable it hath, alwayes beene to God, by those that liued in the first world, doth plainly appeare. The scripture sheweth howe graciously the Lorde accepted the sacrifice of *Abel*, a keeper and feeder of sheepe, besides *Seih*, *Noe*, *Abraham*, *Loth*, *Jacob*, *Iob*, *Amos*. Holy and blessed men are commended for keeping, and feeding of Cattell, wherby attayning to greate wealth, they sustayned them selues, their wiues, their Children, and their huge families. The Sonnes of *Jacob*, when as they were demaunded by the kyng of *Egypt* what maner of life they ledde: made aunswere, that they were feeders and keepers of Cattell, from whiche trade *Lot*, *Moyse*, *Saule* and *Dauid*, were by the will of GOD aduanced to the Crowne. As among the Gentiles the most auncient, and famous Princes were, some of them brought vp by Sheperdes, and some Sheaperdes them selues. *Romulus* and *Cirrus* being mighty Emperours, were brought vp among sheaperdes. Besides *Galerius Maximinus*, *Constantine*, *Probus*, and *Aurelianus*, came all from the Drestall, to the Imperiall Seate. *Homer* commendeth *Ulysses* his Swinherd, for his greate valiaunce and noblenes. That the valiant and noblest people haue professed this trade, the Italians, Germanes, and Swytzers can testifie, whose Countreyes beeyng now growne to more delicacie, then they were wont to be, were wanted alwayes, when their doyngs were most famous, to glory and vaunt themselves of this life, as at this day the Goodlyest and wyslest dooe. And therefore the auncient writers, as well Greckes, as Latyns, doo count the cheefest wealth to bee in the numbers of Sheepe, Cattell and Fruite: for which estimation the Cattell were supposed to be cladde in Golden Goates: whence sprang first the fable of the Golden Fleece of *Colchos*, whiche *Iason*, and his companions attempted to fetch, and of the Golden Apples, kept by the daughters of *Atlas*. Besides the signes of Heauen, the seas, Mountaynes, and Countreyes doo beare their names of Beastes: among the starres, the Ramme, the Bull: the Mountaine, *Taurus*: and the Sea, *Bosphorus*. *Italy* tooke his name of Calues. Howeouer the keeping of Cattell is the worthier, in that it

The worthinesse and antiquitie of keeping of cattell.

The thirde Booke

hath some resemblance of the state of a gouernour: and therefore the Prophetes in their Oracles, and Poetes in their verses, doo often times call kinges and princes by the names of shepherds, and feeders of the people. Vea the LORD of the whole worlde dooth call hym selfe a shepheard. Since it appeareth by these examples, of what worthinesse keeping of cattell is, and howe neare it is linked with tillage, I haue here thought good, after the entreatyng of tillage, Gardning, and Dychardes, to describe as breiefely as I can, the order and maner of keepyng of cattell: whiche skill though *Varro* deuiderth onely into thre partes, I haue deuided into foure. In the first part I put the greate cattell for burden, as Horses, Asles, Mules, Camels: in the second part the lesser sorte, as Sheepe, Goates, and Swyne: in the third, suche thinges as are belongyng to the keepyng and safegard of Cattell, not for the profit they yeelde of themselues, but for their necessarie vse, as Shepherdes Dogges, and Cattes: of these thre partes in this third booke I entreate, of the fourth I referre to the fourth booke. Hauyng thus declared the contention betwixt keepyng of Cattell, and tillage, with the worthinesse and antiquitie thereof, I meane now to prosecute such thinges as are belongyng to the same. I haue brought in the Masters and keepers of euery kinde of Cattell, and resting them selues vpon the Hollyday in the greene grasse, and the Sommers shadowe, euery one declaring his skill and knowledge, accordyng to his profession. The parties are *EVPHORBIUS* the Metherd: *HIPPOCOMVS* the Horsekeeper: *HEDIO* the shepheard, and *EVMAEVS* the swineheard.

EVPH. Now sirra *HIPPOCOMVS*, whither wander you? doo you not knowe that it is hollyday, a day to dance in, and make mery at the Ale house?

HIPPO. Euery day is holly day with lazy and slouthfull marchants: it lyeth mee vppon to looke to my profit, to see whether my Horses feede well, and that they take no harme. The pastures are so burnt with the heate of Sommer, that I am afraid for wante of meate, they will seeke to breake into other grounds, and so hurt themselues.

EVPH. Why byyng you not them into this feede, where
there

there is both a good grotten, and pretie store of grasse among the headgroues.

HIPPO. You perswade mee not to the worst.

EVPH. Come on then, byd *Mastix* your boy bring hither your Horses, and you your selfe, sit you downe vnder this Hasell, that will yeld vs both shadowe and Nuttes, and we wil send for *EVMAEVS*, and *HEDIO*, if you thinke good, and we will passe away the tyme with suche talke as we shall finde.

HIPPO. Agreed. So *Mastix*, fetch hither the Horses, with the Coultis and the Asles.

EVPH. And you *EVMAEVS*, and *HEDIO*, bring your Heardes togeather, and come hither, euerie man shall laye downe his shot, as they vse in the Tauerne, but without money or any charges, declaring at large what belongeth to the Cattell he keepeth. Your Horses *HIPPOCOMVS* are yet in good plight, I sawe the Horses of our neighbour *Agrins* of late which are leaner and barer a great way.

Of Horses. 1

HIPPO. Peraduenture they haue not so good lokyng vnto, though they neyther want pasture, nor are muche laboured; but myne on the other side, are continually laboured, and are not so well fed, but are better looked vnto then my neighbours.

EVPH. Well, since both tyme and place requireth it, I pray you let vs heare what you can say, touching the charge and looking to of Horses.

HIPPO. Surely I haue not so muche money to tell, but I may well be at leysure, and therefore since you are so earnest with mee, I will not denie your request: although that of this matter, an honest and learned Gentleman of England, maister Thomas Blunduille hath so througly written to his commendation and benefite of his country, as there can not be more said: I refer you therfore wholy to him: notwithstanding, breiefely I wil shew you may fandy. Among all other creatures that we vse in our labour, the Horse may worthiest chalenge the chieffest place, as the noblest, the goodliest, the necessariest, and the trustiest beast that we vse in our seruice, and since he serueth to so many vses, I should here bestow some time in his prayse, and in declaring his seruice, but for this, an other tyme shall better serue,

¶.is.

EVPH.

The third Booke

EVPHOR. Wee onely here desire to knowe the signes of a good, and an excellent Horse, and the right maner of ordyng hym.

HIPPO. First you shall knowe that Horses serue for sundrye purposes. Some, for the Plowe, the Carte, and the Packesaddle, others, for light Horses, Coursers, and Horses of seruice, others againe, for Stallions, and breeders: and therefore they must be chosen accordyng to their seruice. Souldiers, and men of Warre, desire a fierse Horse, couragious, swifte and well coloured. The Husbandman would haue his Horse gentill, large bodied, and meete for trauaile and Burden. Notwithstandyng, the breedyng, and bringyng vp of them, is almost one: for in their breedyng, we hope to byng them all to the Saddle.

EVPHOR. What thinges are most to be considered in their breedyng?

HIPPO. Hee that hath a fawse too breede Horse, must first prouide himselfe of a good race, and then of good grounde, and plentie of pasture, whiche in other Cattell, ought not to bee so greatly obserued, but in Horses there must bee speciall care thereof. And therefore, you must first see that your Stallion bee of a good race, well proportioned, and framed in euerie poynt, and in the like sort, the Mare. Some reckon their goodnes by their Countreyes, wherein they take for chiefe, the Genet of Spaine, the Courser of Naples, the Sarmacian Horse, the Peloponesian, the Turkey, and the Thessalian: but these serue chiefly for runnyng, and swiftnesse. For largenesse of bodie, enduring of labour, and fitnesse for breede, the best are to bee had out of Freeseland, Hollind, and Artoys. The shape and proportion of the Horse, ought heedily to be considered, for the verie looke and countenance oftentymes, declareth the goodnesse of his nature. Therefore, you must diligently consider his makyng, from the heele to the hedde, and first you must cheefely regarde his Feete: for as in viewyng of a house, it is in vayne to regarde the beautie of the vpper roomes, if the foundation bee ruinous: so the Horse that is not sounde of his Feete, will neyther serue the Souldiour, the Husbande, nor the Trauayler.

In your looking vpon him therefore you must first consider his
 hooves that they bee not tender and soft, but harde and sound,
 round and hollowe, that the hollownesse may keepe his foote
 from the ground, and soundyng like a Cymball as (*Xenophon*
 saith) may declare the soundnesse of the foote, for the hoofe that
 is full and fleshy, is not to be liked, and the Horses that haue such
 hooves doo easely halt, wherefore diuers commend a Horse like
 the hoofe of an Ass, the pastors next to the hoofe not to longe
 as the Goate hath, for shaking of his rider, and breeding of wind-
 gall, nor to short, for beyng hurt in stony ground. The legges
 and the Thyes, sith they are the standerdes of the body, they
 ought to be euen, straight, and sound, not gouty, with much fleshy
 and baynes, for suche as haue their legges clad with much fleshe
 and baynes, they with greate Journeis growe full of windgals
 and swellinges whiche will cause them to halt, which Legges at
 the first soling, are as long as euer they will be, by reason where-
 of you may gesse what heigth the Horse will be of, beeyng yet a
 Coult. The knees must bee round, flexible, and small, and not
 bowyng inward nor stiffe, the Thies large and well brawnied,
 his brest greate and broad, his necke soft and broad, not hang-
 ing like a Goates, but byrigh like a Carkes, and well reyning,
 his mane thicke, faulding on the right side, some like it better on
 the left, his head small and leane, for a greate and heauy head, is
 a signe of a dull Jade, his moustell short, his mouth wide with
 large wrinkles, Rill playng with the Bytte and foming: as
Virg. There stamping standes the steed, and fomy byrdell fierce
 hee champes. The Horse that hath a dry mough is nought, his
 cheekebones would be euen and small, for if they stande to farre
 a sander, he will be ill to be bydded, and the vneuenes of the
 Cheekes, will make hym headstrong, and neuer to reyne well,
 but to thrust out his head illauoredly, his eies great, bluddy, and
 fiery and standing out of his head, whiche is a signe of quicknes
 and liuelynes: hollowe and littell eyes are nought, and blacke or
 pale starres in the eyes are to bee dyspayred: these faultes are
 best spied in the nyght by Candell light. *Columella* commen-
 deth blacke eyes. A wall eye is very good, suche as they say *A-*
lexanders Bucephalus had. The eares must be shorte, standyng

The hoofe.

The legges.

The knees.

The thy es.

The brest.

The necke.

The mane.

The hed.

The mouth.

The eyes.

The eares.

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The nostrell.

The shoulder

The chyne.

The sides.

The loynes.

The belly.

The buttocks

The tayle.

upright, and stirring, for the eares, bee the tokens of a Horses stomake, whiche if they be greate and hangyng, are signes, of a Jade. The Nostrelles must be wyde, the better to receaue ayre, whiche also declareth a liuely currage, his shoulders large and straight, the sides turnyng inwarde, the ridgebone ouer the shoulders beyng somethyng hie, geuees the horseman a better seate, and the shoulders, and the reste of the bodie, is stronger knitte together, if it be double, his sides deepe, well knitte behinde, and something bowed vp, whiche both is better for the Horseman, and a signe of a greate strength: his Loines, the broder they be, the better he listeth his forefeete, and followeth with the hinder, and his paunch shall the lesse apeere, whiche both disgraceth him and burdneeth him, his belly must be gaunt, his buttockes large, and full of fleshe, answerable to his brestes, and his sides, for if he bee brode hanched, and well spred behind, and goeth wide, his pace wilbe the surer, whiche we may perceaue in our selues, if wee assaye to take vp a thing from the ground, stryding, and not with our Legges, togeather, we take it vp with more ease and strength. His tayle would bee longe, bristly, and curled, the length whereof, is not onely a beaute, but also a greate commediate to hym to beate away flies: yet some delight to haue them curtailed, specially if they bee brode buttockt. In fine, the hole bodie would be so framed, as it be large, hie, liuely spited, and well trussed. Some horsemen would haue their Horse to be limmed after the propozcion of diuers beastes, as to haue the head and legges of a Stagge, the eares and tayle, of a Fox, the necke, of a Swanne, the brest of a Lion, the buttockes, of a Moman, and the feete of an Ass. Virgill in his Georgickes doth verie Clarkely describe the tokens of a good Horse.

With hedd aduanced hie at first, the kindly Colt doth pace.

His tender limmes aloft he lifts, as well becomes his race.

And formost still he goeth, and through the streame he makes his

And ventures first the bridge, no suddain sound doth hym way.

Hy crested is his necke, and eke his hed is framed small. (affray.

His belly gant, his backe is brode, and brested big with hall.

The

*The bay is alwayes counted good, so likewise is the gray.
 The white, and yellow worst of all, besides, if farr away
 There happen any noyse, he stamper and quiet cannot rest.
 But prauunceth here and there, as if some sprite were in his brest.
 His eares he sets upright, and from his nose the fiery flame
 Doth seeme to come, while as he snuffes, & snorthes at the same.
 Thicke is his mane, and on the right side downe doth banging fall.
 And double chinde vpon his loynes, a gutter runnes with ball.
 He scraping standes, and making deepe a hole, he paves the ground
 Whiles as aloud his horned house, all hollowed stemes to sound.*

You see in how fewe verses the Poet hath expressed the properties of a good Horse: other conditions there bee for whiche they bee liked, when they be pleasant, first liuely, gentle, and tractable: For suche as Columella sayth, will both better bee taught, and better away with trauayle. Xenophon accounteth it a signe of a good Horse, if after the wearines of his iourney he seeme to labour lustely: againe, we finde also by experience, the better the Horse is, the deeper he thrustes his hed into the water when he drinketh, and that (being a Colte) striueth to outrunne his fellowes in the pasture, and as Virgil sayth, leape firste into the water, and passeth bridges, not tarrying for an Usher, nor fearyng the Ile.

E V P H O R. What colour in Horses count you the best. The Poet seemeth to mislike the white, whiche others agayne, as I haue sundrie tymes heard, commend, specially in England, where they are well accounted of, and most esteemed.

H I P P O. Touchyng the colours, there are diuers opinions, and of all colours, lightly you shall finde both good and badde: so that the colour is not so greatly to be regarded, if hee haue other tokens of a good Horse, yet for beautie, and many tymes for goodnes, we make choysse of colour. The best colours as diuers suppose are these, the rone, the white lyarde, the baye, the sozell, the dunne, the dapple gray, the alby white, the flebitten, the milke white, the blacke, and the Iron gray, the Bay is most of pꝛice as farre as I see at this daie, and pre-

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ferred by the Poet aboue the rest. The Frenchemen call the bay Horse *Le Bayart loyal*, trustie Bayard; they are the better that haue a starre in the forehead, and the foote spotted a littell with white, aforesayme the dapple gray, the flebitten, the mousedun, and the grisell weare most esteemed, and suche as came nearest to them, as the Iron gray, the bryght forell, the browne baye. Only *Plato* commendeth the milke white, that *Virgil*, dispayseth. Others commendeth the blacke, specially if he haue either white starre in his forehead, or strake downe his face, or hath any white vpon his foote, the Cole blacke without any white, is altogether misliked, the fleabitten Horse proueth alwaies good and notable in trauple: the yelowish and the skued or pyed Horses are discommended almost of all men, notwithstanding eyther of them (if they bee well marked) proue oftentimes well inough, specially the yelowish, if he haue a blacke list downe his backe from the necke to the tayle. The Stallion therfore would be of one colour, strong bodied, well limmed, accordyng to the proportion afore. The Mares would likewise haue the said proportion of the stallion, specially to haue large bodies, faire and betwifull, of one colour, greate bellied, with large and square brest and buttockes.

The Stallion.

The Mares.

Age.

EVP. What age count you best for breede?

HIP. The Stallion may goe with the Mares when his toyntes and limmes be well knitte and come to their groweth, for if they be to young, they get but weake and wearishe Coltes: some vse too let them goe togeather at twoo peeres olde, but three peere olde is the better: the Stallion will serue you from that tyme till twentie yere, it hath beene seene that they haue gotten Coltes till fortie, beyng helped a little in their businesse, for it is not peeres but skill that abateth lust, as *Aristotle* afore *Plini* wrote. Yet some thinke them not meete for breede before the fourth or fifth peere, in whiche space they feede them lustely, to make them more coragious, for the lustier they bee, the better Coultres they bring, neither would they haue vnder sitting Mares, nor aboue twentie, for one Stallion, *Herodotus* writeth that one Horse will well suffice twentie Mares, but the number ought not alwayes to be obserued, but sometymes more, sometymes

tymes lesse, accordyng to the state of the Horse, that he may the longer endure: a young Horse should not haue aboue fyftee or fyftee Hares with hym: the Horses must bee sometime seuered, for daunger and hurting of themselves, hauing in the meane tyme good regard to the state of his body, for some bee weaker and fainter then others.

EV P. What age doe you thinke best for the Mare to go to the Horse?

HIP. The Hares will conceaue at two yeeres olde, but I take it the better not to suffer them till they bee thre yeere olde, as likewise I thinke them not meete for Coultres after ten, for an oulde Mare will alwayes byng a dull and heauie headed Jade: the goe with Foale aleuen monthes, and sole in the twelfth.

EV P. How can you knowe their age when you be doubtfull of it?

HVP. That may you knowe diuers wayes, but specially by the teeth, and those teeth that declare the age, the Grecians call *γνώμονες*, whiche teeth when he loseth, he looseth both estimation and sale. *Aristotell* affirmeth that a Horse hath 40. teeth, of whiche he casteth the thirtieth month after his foalyng foure, two aboue, and two beneath, againe in the begynnyng of his fourth yeere he casteth likewise foure, two aboue and two beneath, being full foure, and goyng vpon his fift, he casteth the rest both aboue and beneath: suche teeth as come vp agayne bee hollowe: when hee beginneth to bee sixe yeere olde, the hollownes of his first teeth is fylde vp: in the seuenth yeere all his teeth are fylled vp, and no hollownes any longer to bee seene: after whiche time, no iudgement of his age by his teeth is any more to be had: there are some that take vpon them to tell his age by the Joyntes of his tayle, after the marke is out of his mouth. *Palladius* shewes, that a Horse when he be gynneth to be oulde, his temples waxe hollowe, his eye byes graye, and his teeth long. *Aristotle* saith, that the age of all fourfooted beastes may be knowne by the skinne of their Jawes: for if it be pulde vp and presently let fall againe, if it fall smoothe, it declares a young beaste, if it lye in wrinkles, it sheweth he is olde. A Horse liueth commonly

the age of a horse
how to know it

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commonly twentie peeres, some thirtie, or fortie, and also to fiftie, as *Aristotel* saith, if hee bee of a good disposition and well dyeted, it is sayd there haue beene Horses that haue liued 75. peeres, the Mare liueth not so long as the Horse, nor the Stallion, so long as the Horse that is not suffered to runne amongst Mares: the Mare leaueth growyng at fise peere olde, and the Horse at sixe or seuen.

E V P H O R. What tyme thinke you best for coueryng of Mares.

H I P P O. In the spring, after the twelfth of Marche, I take to bee the best, after the spring in the rest of the yeere they are to be kept from the Horse, for hurtyng of the Horse: for the Mare, after she hath conceiued, suffers the Horse no more, but beates and strikes hym with her heeles, yet in moste places, they suffer their Stallions to runne with their Mares all the Sommer long, and take it to be the best way, for answering the Mares desire, for many tymes the Mare will not abide the Horse till Somer tyme, or August, and the August Coult proues commonly verie fayre, Although the Colts that are foled in the Spring, are not to be desired, because they runne all the yeere with their dammes in good pasture, and therefore it is best at that tyme to put the Mare to the Horse, for these creatures specially, if you restraine them, are most enraged with lust, whereas came at the first the name of that dedly popson *Hippomanes*, because it stirreth vp a fleshly affection, accordyng to the burnyng desire of beastes, whiche groweth in the forhed of the Colte, of the quantitie of a Figge, and blacke, whiche the damme doth straight, as soone as shee hath foled, byte of: and if shee bee prevented, she neither loues the Colte, nor suffers hym to sucke, neither is to bee doubted, but that the Mares in some Countreyes so burne with luste, as though they haue not the Horse, with their owne seruient desyre they conceaue and byng foorth after the maner of Byrdes, as the Poet noteth.

In furius lust the Mare exceeds all other beastes that be.

It hath bene sayd, that in Spaine Mares haue conceaued with the winde, and brought vp their Colts, but the Colts haue not liued

liued aboue thre yeres. Aristotle writeth, that a Hares desire is quenched by shearyng of her Hane.

EUPHOR. What if the Hare will not take the Horse, is there no meanes to make her :

HIPPO. There are that rubbe her Tayle with Sea Onyons, Nettles, or Hadder, and so prouoke her to luste, some tyme a skuruy Tade is put to her, who when hee hath gotten her good will, is straight remoued, and a better Horse, put in place. If the Horse bee to slouthfull, his currage is stirred up by wyppynge her Tayle with a Spunge, and rubbyng it about his Nose. If wee would haue a Horse Coult, we knitte the lefte Stone of the Horse with a Corde, and for a Hare the right. The lyke is too bee obserued almost in all other beastes.

horse rolled
more rolled.

EUPHOR. How often muste shee bee Horsed after shee take.

HIPPO. They take not alike, some are sped at once, some twise, some more. It is saide, a Hare will not suffer aboue fiftene times in the yeere: being often times satisfied with fewer. They must be put to the Horse at tymes twyse a daye, in the mornynge, and at night, when they are sped, it appeareth by refusing and striking at the Horse. They say, there is amongst these beastes a great regard of kinned, and that you can hardly force the Coult to Horse the Danime: for prooffe whereof they report, that where as a certayne Horsekeeper did make his Horse, by coueryng his eyes, to couer his Danime, the clothe beyng pulde away, when hee saue what he had doone, he ranne vppon his keeper and slewe hym: as soone as shee is couered, the Hare muste out of hande bee beaten, and forced to runne, least shee loose that shee hath receaued. Surely a Hare of all other Beastes, after her coueryng, dooth runne eyther Southward, or Northward, accordyng as shee hath conceaued either Horse Coult or Hare Coult: her couler also dooth chaunge and become brighter, whiche when they perceauie, they offer her the Horse no more. Some after a fewe dayes if the doughter, offer the Horse againe, and if shee refuse and strike (as I saide before) they iudge she hath conceaued.

EUPH,

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EV P. Must they be couered euery peere?

HIPPO. Such is our couetousnes, as wee seeke to haue them beare euery peere: but if you will haue good Coultres, let your Mares go to Hogle but euerie ot her peere, so shall they well answere poure desire, howbeit the common vse is euerie peere

EV P. Wee see Asses sometymes to couer Mares commonly, and thereof is engendred the Hogle, and soled in the xxij. moneth, as shall be said hereafter. Some say it is best to cut the Name of the Mare that shalbe couered of the Ass, though others hold opinion that it shall abate her lust. The Mares that be with foale, must be well looked vnto, and put in good pasture. And if thoroowe the colde winter, pasture bee wantyng, they must bee kept in the house, and neither laboured nor iassed vp and downe, nor suffered to take colde, nor to bee kept to many in a straight rone, for castyng of their foales, for all these incomueniences wil hasard their foales, yet too trauayle them moderatly, will dooe them rather good then harme, for to long rest will cause them to be restife, and to tper sooner. *Aristotle* writeth, that the *Sithians* did vse to trauaile their mares greate with foale after the tyme they began to stirre, supposing their folynge should bee the easier, but good heede must be taken, that their bellies bee not hurt with any thing whyle they are with fole, but if so bee the Mare be in danger, either in castyng her fole, or in foling, the remedy is, *Poilipody* stamped, midgled with warme water, and giuen with a Hozne: it is sayde that the smell of a Candell snuffe causeth them to cast their foles: you must euerie peere ouersee your Mares, and suche as bee vnprofitable or barrayne, must be put awaye, for from their first foling, they are not too bee kepte aboue tenne peeres, at whiche tyme they are lustie enough, and may be well solde, but so will they not be after: The yong foales are not to bee handled with the hande, for they are hurt with the lightest touche that may bee. It must bee seene vnto, that if the Mare bee housed, there bee roome enough for her and her fole, and that the place be warme enough, that neyther the cold harme it, nor the Dammie ouerlye it, and therefore the place must be well chosen, that is, neither to hotte, nor

to colde, and after wardes by little, you must bring vp the Colte: when it groweth to be something strong, it must be put to pasture with the Mare, least the Mare receaue hurte, by the absence of it: for chiefly this beast of all others, most esteemeth her young, and if she be kept from it, taketh harme: the Fole that lackes his damme, is often brought vp, of other Mares that haue Coltes: the Mare must go in verie good pasture, that the Colte may haue store of milke. Being five monethes olde, when you hyng them into howse, you must feede them with Barley flowre and Branne: at a tweluemoneth olde, you must either put them into good pasture, or feede them with Branne, Chaffe, and hay. Varro will not haue you to weane them, till they be two yeeres olde: and though I like not too soone weaning, yet wee vse commonly to weane them at five or sixe monethes olde, and to let them runne in good pasture, whiche custome proueth not amisse. Moreouer as long as they runne with the Damme, you shall doo well to handle them now and then, least, when they bee put from the Damme, they waxe wilde: they must bee taught to be gentill, and not only to abide a man, but to couet his company, and not to bee affraid at euery strange sight, nor at euerie noyse, but to come to it. Xenophon saith, we must (as men) prouide Scholemasters for our Children, so likewise teachers for our Horses, and appoint how we will haue them broken: for as their seruice is diuers, so must be their breaking. But hereof we shall speake more hereafter, when we entreate of horsemanship, and breaking of Horses: onely now we will deale with those that sucke, and serue for the plowe. To make them gentler, the bridles, and other horse harneyes, must be hanged by them, that they may the better bee acquainted with them, bothe with the sight, and the ginglyng. Now when they be well tamed, and will suffer to be handled, Varro would haue you lay a boy grouelyng vpon them twice, or thise, and after to bestride them, and this he would haue doone, when they bee three yeere olde, for then they growe most, and begin to be great brayned. There be that thinke a Horse may beging to bee handled at a yeere and a halfe olde, and Varro, at thre yeere old, when their prouender is giuen them: but we vse commonly after two yerres to labour them gently

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gently, first in harrowing of new plowed land, whiche is good both for their foote, and their place, and also with plowing, and suche like exercise: whereby we vse to acquaint them with colde and heate, in drawing together. It must be seene to, that they be euen matched, least the stronger spoyle the weaker, while he dreads the rating and whipping. Horses take lesse harme with drawyng then with bearing. Thus must they be vsed to reasonable trauaile, by reason wherof, they will be the harder, and not so lightly take harme: but herein must be greate discretion.

EVPH. What say you to Geldings? for in these partes we vse Geldinges most.

HIPPO. They serue for some purpose, but he that will haue a good gelding, must geld (as they say) a good Horse, they are cut at a yere olde and elder: I my selfe haue cut them at fife yere old, & sixe yere yold: in cutting the loose their stomacke, you must looke that they be in good plight when you cut them, for as they are at their cutting, they commonly continue. The Mares also vse to be spayed, but not often, and with great danger.

EVPH. What maner of stable would you haue, for I haue sometimes hearde, that the stable is of great importance?

Stables.

HIPPO. Your stable must be buylt in a dry place, for wetting the Horses hooft, which you shall auoyde, if you planke it with good Oken Plankes, or (whiche *Xenophon* would rather haue you doe) with round paving stone, keying it alwayes cleane from dung, and straw, and after laying fresh litter, so as they stand harde, and lye soft. *Xenophon* would haue the stable so placed, as it may alwayes be in the Masters eye, and to be light-some, least the Horse being vsed to the darke, his eye dafell at the light. Some thinke they will be the gentler, if they be vsed to the light, and the fairer, if they haue the sunne at his rysing in somer tyme: let as much ayre come to them both day and night as you can. In winter, your stable should rather be warme, then hot, and therefore your stable must stand toward the South, but so as the windous may open toward the North, whiche beyng kept shut in winter, may be warme, and opened in somer, you may let in the coole ayre.

EVPH. The like we vse in our Oxe stalles.

HIPPO.

I H P P O. Besides, wheras the bodics of cattell, haue nede of rubbing, as well as mens bodics, for many tymes it doth the Horse as muche good to bee stroked downe the backe with your hand, as to feede hym. The Horse is to be continually curried in the morning, at night, and after his labour. In currying of them we must begin at the head, and the necke: for it is a vaine thing to make cleane the lower partes, and leaue the other soule. It is good also to obserue due times for his feeding, his watering, and his trauaile. Thus muche of his exercise. Now followeth to speake of his dyet: and because wee haue spoken before of his pasture, we must also say somewhat of his other feeding. The better a man would haue his Horse to proue, the better must hee looke to his meate, for the good feeding (the country people say) is a great helpe to the goodnesse of the Horse. If the Horse bee young (as I said before of Coltes) he must be fed with grasse, chaffe, and hay: if he be elder and mete to trauaile, his foode must be the drier, as Chaffe, Barley, Dates, and Hay, Chaffe doth not so wel nourish, by reason of the drynesse, but it keepe the body in good plight: and because hard meate is hardest of digestion, it is therefore to bee geuen to those that labour. The stocke or stubbe, must be pastured in large pastures and marshes, as also vpon mountaines and hilly groundes, but euer well watred, not dry, rather champion then woddy, and rather soft sweete grasse, then hie and flagg: if the pasture be too thort, they sooner weare their foreteeth, and are toothlesse before their ful age. And where as euery kinde of Creature is naturallly moyst, a Horse ought cheefely (whether he be young, or old) to be fed with moyst pasture, for the better conuersation of his naturall temperature. Some would haue you in no wise to geue your Horse Grasse in the spring tyme, but in Iune, or the fall of the leafe: they would haue you geue them grasse with the deaw vpon it, & in the night season Dates, Barly, and Hay. Nowbeit, in the colder countreis in Germany, France, and England, where the pasture is very good, they doubt not to skowre theyr horses with greene grasse. and weedes of the meddowes: & in the hotter countries, they do the like with greene blades of wheate, or barly. Some vse to geue the Apples shored in peeces, to skoure the withal, & thus much of skouring

Currying.

Dyet.

Skowring.

The thirde Booke

Prouender.

Feouring of Horses. Generally who so euer will haue his Horse helthy, and able to endure trauaile, let hym feede his Horse with Dates, mingled with chaffe or strawe, so shall he be temperatly and well fed, and if so he labour much, geue him the more Dats. His meate must bee geuen hym as some thinke best, in a lowe Hanger, set so lowe, as they are forced to eate their meate with some difficultie or trauaile, whiche they saye is to make them bend their neckes: by which exercise both the head, and the necke groweth bigger, and they will be the easier to be Bridled: besides, they will be the stronger, by reason of the hard setting of the forefeete. Howbeit, in some places, they vse hie standyng Hangers: after what sort so euer they be, they must alwayes be kept cleane, and well swept before you cast in their meate. Their prouender though diuers Horsescorers, that liue by sale of Horse, doo feede them with sodden Rie, or beane meale sodde, pampering them vp, that they may be the fatter to the eye: yet is it not good foode to labour with. The best Prouender that is, is Dates, and for defawte of them, Barly: you must beware you geue them neyther Wheate, Rie, or any dry pulse: their Prouender must be geuen them rather often, and littell, then once or twyse a day in greate portions, least you glutte them therewith: they are vsed to be fed commonly fve tymes a day, when they stande in the stable, keepyng an equall number of houres betwene the tymes when they trauaile you may geue them meate seldomer, but in greater quantitie, and if their iournies be long, they must haue prouender besides in the night, alwaies remembryng (as I sayd) that you glutte them not. The better a Horse feedeth, the better will he labour: you must also beware that you geue hym no prouender, neyther Dates nor Barly, after any greate labour, till he be thorowly colde: notwithstanding you may geue hym a little hay to coole his mouth. The hay must be sweete and well made, and thorowly shaken, before it be cast into the racke: and specially seene too, that there be no feathers of any fowle amongest it. If the Hore be very hotte after his labour, let hym be well couered, and softly walked tyll he be colde, before you set hym vp: when he is set vp, litter hym well, least the colde of the ground strike unto hym: in any wise washe hym not when he

is hot, but when he is through cold, water hym, and washe him, wipynge hym drie when you dryng hym in. If the Horse forsake his meate, some vse to stampe Barlike and Peper, and to giue it hym, rubbinyng his teeth well, till his stomacke come to hym: Some would haue a cloute wet in salt water tied vppon a stricke, and thrust into his iawes. In watring, you must looke well vnto hym, for (as *Aristotle* saith) beastes doe feede, and are nourished the better, if thei be well watered. Horses and Camels, doe loue best to drinke a thicke troubled water, in so muche as if the water be cleare, thei wil trouble it with their ferte: for the most Bullockes again desire a faire cleare water, and runnyng. The same *Aristotle* also affirmeth, that a horse maie suffer thirst iiii daies without drinke. *Varro* willes you to water your Horses twice a daie, whiche order we obserue, that is, once in the mornynge, and again in the afternoone: but in Winter, if thei drinke but once a daie, it suffiseth: befoze you water hym, he muste bee well rubbed, and then ledde into the water vnto the knees, specially if he be leane, if he be fat, he maie go the deeper. Notwithstanding, there are some that hold opinion, thei ought not to go so deepe, as their stones touche the water, specially if the Horse be yong. After Marche, and the Spring, it is very good to ride them vp and doune in some riuer, whiche will exercise their legges, for the water dryeth the legges, & restraineth the humors from fallynge doune, and kepeth them from windgalles: as sone as thei come from the water, you must with a little straw wipe them cleane, for the dampe of the stable causeth inflammation in the horses legges that be wet. The water (accordynge to *Vegetius* his minde) would be cleare, and springing, other like it a little runnyng and troubled in a claie ground: for this water, by reason of the thiknesse and fatnesse, dooeth better nourishe and feede the horse, then the swift runnyng streame: yet those horses that are vsed to the swifte and cleare Riuers, are commonly the strongest and best trauailers, and therefore it would be well considered how the horse hath bin accustomed: the colder the waters are, the lesse thei nourishe, the deeper a Horse drinke, the fatter he proues: and therefore some Horse courser's vse to washe their Horses mouthes, firste with water, and after to rubbe the with

D. J.

salt,

The third Booke

Salt, to giue them an appetite to their meate and their drinke.

EVPHOR. I praye you lett vs heare some remedies for Horses diseases, for (as *Aristotle* saith) a Horse hath as many diseases as a man.

HIPPO. As touchyng diseases in a Horse, it is better to preuente them by good heede takyng, and (as *Vegetius* saith) to be more carefull in keepyng a Horse healthie, then when he is sicke to cure hym: whiche health you shall continue with ease, if you will obserue those thinges, touchyng his diet, his stable, and his labor, that I haue told you of before. Who so euer will haue a good Horse, and keepe hym in good estate, must often tymes see hym, come to hym, handle hym, and stroke hym: For that bothe makes hym gentill, and giues hym a faire coate: and bee still mindfull of the old prouerbe, the maisters eye maketh a fat Horse, and to be short, to haue hym so still in his sight, as he rather wante his owne meate, then his Horse shoulde: For he that neglecteth his Horse, neglecteth hymself. To let hym haue moderate exercise, and to ride hym now and then (if the weather be faire) into the felde, will doe hym greate good: the mornynge is better to labour hym in then the eueryng, neither muste you in Winter, or in Sommer ouerlabour hym, for beyng in a sweat, and after takyng cold, he falleth into daungerous diseases. And therefore remember what I saied, that where so euer you haue laboured hym, or ridden hym, bee sure ye couer hym with some clothe, and walke hym softly, that he maie be cold, before he either bee suffered to eate, or drinke: when he is colde, he maie bee led to the water, and washed: so as whē you byng hym into the stable, you litter hym well, and througely rub hym, and so giue hym meate. If he be ouer trauailed, the onely remedie is reste, and after his sweatynge, to washe his mouthe in Sommer with water and vinegar, in Winter with hyne: for the neglectyng of these thynges, hath been the destruction of many a good Horse. Also, to powre into his mouthe Wine and Oile, in Sommer cold, in Winter warme (as *Vegetius* teacheth) and as we finde by experiece, is very good: for it is commonly seen, that a tired Horse (if necessitie forceth a further iourney) with powryng in a quart of good wine, will trauaile lustely. You must not suffer
your

your Horse to drinke after his iourney, till he bee colde: how bee it, if he sweate not extreamely, and bee ridden soone after, it is not so dangerous: It is farre better to lette hym thriste, then to giue hym colde water if he be hotte. If a Horse haue long rested, he is not to bee traualled vpon the sudden, either in gallopyng, or long iourney, but to be laboured faire and softly at the firste. A Horse that is wearie, or tired, will bee wonderfully refreshed, so as it would seeme he had neuer been traualled, if he maie wallowe hymself either in the stable, or other drye place out of the winde and raine, and therefore *Xenophon* would haue neare vnto euery Stable, a place meete for their wallowynge, wherein after their iourneys, thei maie tumble them selues: for in so dooynge, thei shewe thei are in healtie, and refresh thei selues. You must looke diligently that thei be well looked to at night, and that after their sweate, thei bee well rubbed and cured, and that thei bee not disquieted when thei shoulde reste. In Winter, thei would be clothed with Tollen for takynge of cold, and in Sommer with Canuas, to keepe them from flies. You must beware, that you iourney them not long without stalynge, but after you haue traualled an houre, or suche a tyme, prouoke them to stale (by ridynge them out of the wate) into some place where sheepe haue dounge, or into some hie Grasse, fenne, or Stubble, whiche order was continually obserued, by the beste dieter of Horses that euer I knewe in Englarde, one *Henrie Kyng*, who hauynge charge of that moste worthy gentlemans Horses, *sir Thomas Chalenour*, caried a faire compaignie of geldynges from London, to the Courte of Spaine, who notwithstandynge their long iourney through Fraunce, and the painfull passage of the *Pirenies*, by the skilfull diligence of their keeper, came thither in a good plight, as thei came out of Englarde. And if so be you see he can not stale, or staleth with paine, you must bathe hym with bath appointed for cold, that is, bile mingled with wine powred vpo his loines: also a Loue put into his parde, or Sope put into his fundament, hath been seen to helpe hym. If this dooe not helpe, you muste squirt in Romie boyled thin with salt into his parde. Some would haue the licour of the linne *Bumme* squirted in: *Elomus* wyteth, that the Horse that

The third Booke

Vertue of a
Maides girdell

to cause y^e hoof
to growe

can not stale, is presently remedied, if so bee a maide strike hym
vpon the face with her girdell, the feete (whiche is the cheefest
matter in a Horse) you shall alwaies keepe sounde: if as I tolde
you afore, your stable bee well paved with rounde stone, or well
planchyed and kept cleane: which doen, you must stop his hooves
with Cowe dong, or for want thereof with Horse dong watred,
and the legges must be often rubbed with a strawen wispe. To
cause the hoofe to growe, or to repaire the broken hoofe, take of
Garlicke heaves seven ounces, of Hearbe grace thre handfull-
les, of Alloine beaten and sifted, seven ounces, of Barrowes
grease very old two poundes, mingle all these with a handfull
of Asles doung, boile them, and annointe the hooves therewith.
After their iourney, see you searche their feete well, suffering
no grauell, nor filth to remaine therein, you shall well refresh the
their hooves with the ointmente afore said. The ioyntes, or the
pasternes, would be well bathed after their traueil with warme
wine, or an egge or two would be thrust into their hooves, the
legges them selues would bee washed, with warme Beere, or
some like bach. If the horse thrust out one of his feete, and stand
not even, it is a signe of some fault in the foote: the horse halteth,
either by reason of the spoiling of his hoofe in iourney, or by
ill shootyng, or by unholsome humours fallen doune, by long
standyng in the stable, or by windgalles. If the faulte bee in the
shootyng, strike vpon the head of euery nalle with the hammer,
and when you perceiue hym to shrink, plucke out that nalle, or
powre vpon the hoofe cold water, and that nalle that is first drie,
plucke out: if the matter, squeeze it out, and powre in Pitch well
sodden with olde Swines grease: you muste also speedily open
his hoofe belowe, that the matter (if he bee full of corruption)
maie descende, least it breake out about the hoofe, and so cause a
longer tyme of healyng. The signes of it bee, if he holde vp his
foote, whiche if you doe pare hym to the quicke, and where you
perceiue it to looke blacke, open it, and let out the matter: if he
be hurt inward, and standeth but on his toe, he sheweth the fault
to be in his hoofe: but if he tread equally with his foote, he decla-
res the greif to be some other where, then in the hoofe: if in his
haultyng he bowe not his ioyntes, it is a signe the soze is in the
ioyntes.

iointes. For all haltyng generally, mingle Hempe with the white of an egge, and stoppe the foote withall, and after clay on the shooe: if it be a wounde, put herein the pouder of Distreshelles, and Clerdegrease to drie it vp, or the white of an egge, with Soote and vinegar. The Cratches (as thei commonly call the) is a malady that happeneth betwixt the pastornes and the hoofe in the maner of a skabbe, and ingendered of the dampes of the Stable, while he standeth wette legged: the remedie whereof, is all one with the paines, whiche is likewise a Sozaunce breeding aboute the ioyntes, breakyng the skynne, and mattrying: takyng awaie the heare, washe the soze with warme Beere, or with the brothe wherein is sodden Ballowes, Brimstone, and Serpes suet, whiche must bee bound about the soze place morning and euenyng, or els Sheepes suet, Goates suet, Swines grease, Clerdegrease, and quicke Brimstone, Bole armeniac, and Sope, boile and made in ointment, where with you shall anoint the soze twise a daie, washyng it first with warme wine, and after it is drie anoint it, in the meane tyme kepe hym out of the water: the lees of wine is also sometyme bled in the curyng of the Cratches. Windgalles, whiche are swellynge, and risynge in the legges, are cured with cuttyng, & burnyng: some thinke thei maie be restrained and cured by ridyng the Horse oftentymes vp and downe in some cold and swift streame, also by washyng his legges with Salt, Vineger, Swines grease and Oyle, wrappynge the vp certaine daies, or by launcyng, or skarifyng thei are cured: the out ward sores are healed by burning. If the backe be wrong with the saddell, or other wise hurt that it swell, *Vegetius* would haue you to seeth Onions in water, and when thei be so hotte as the Horse maie suffer, to laie them vpon the soze, and binde them fast, whiche will asswage the swellynge in one night. Item salt beaten and medled with Vineger, puttyng to it the poke of an Egge, laied vpon the swellynge, will heale it: besides, Arsmart stamped and laied to, doeth presently asswage the swellynge. If the backe bee gaulled, washe it with Beere and Butter, or caste vpon it the pouder of Loame wall. There is a diseale that is common in Horses, called the Uines, whiche if he haue, tourne doune his eare, and launce the soze at

for all haltinge
wound

Cratches

windgalls

The third Booke

Remedy for a
foundred horse

the roote of the eare, & take out the matter: but take good heed you cutte not the vaine that lieth a little aboue. If a Horse haue been sette by hotte after his iourney, and in his heate ha. h been watred, or taken colde, whiche the Germanes call *Verfaugen*, in Englishe foundred, or in some places fraied: the remedie, is the skinne of a Whezell cutte in small peeces, freshe Butter, a rotten Egge and Vineger mingled together, and powred into the Horse with a horne: after whiche, lette hym stande couered with a wet clothe, till he ware hotte. A present, and assured cure for this discale, I learned not long agoe, of that honest, wise, and valiaut Gentleman, capitaine Nicholas Dalbee, in whom there wanteth nothyng belongyng to a woorthie Souldier, his medecine was this: Carter ethe legge immediatly one handfull aboue the knee with a list, good and hard, and then walke hym to chafe hym, and put hym in a heate, and beyng somwhat warmed, let hym blood in bothe the breast vaines, and in the vaines of the hinder legges, betwene the hooft, and the pastorne, reseruyng the blood to make a charge withall in this maner. Take of that blood twoo quartes, and of Wheate meale, as it cometh from the Mill, halfe a pecke, and sixe egges, shelles and al of Bolearmeniacke halfe a pounce, of *Sanguis draconis* halfe a quarterne, and a quart of strong vineger: mingle them all together, and charge all his shoulders, breaste, backe, loines, and forelegges therewith, and walke hym vpon some hard ground: thre howers after, leade hym into the stable, and let him stande tied 2. howers to the racke, without meate or drinke, and walke him then twoo or thre howers more, and then giue hym a little warme water, with ground Salt in it, and after, a little Haye, and prouender, then walke hym againe vpon the hardest ground you can get: you shal ride him the next daie a mile, or two softly and so from daie to daie, vntill he be well, whiche will be within thre or fower daies. Remember to let hym stande the first daie after his first walking, two hours in water vp to the bellie: this medecine is infallible. The Collicke, or paine in the beallie, is thought will bee eased in a Horse, or Hule, onely with the sight of a Ducke, or any water foule. To keepe your Horse fro flies, it is good to washe hym ouer with the iuice of the leaues of the Gourde,

Cure for the
collicke:

Courde in the middes of Sommer. Many tymes Horses are troubled with wormes, or bottes, whiche you shall perceiue, if thei cast their looke vpon their beallie, if thei wallow oftentimes, and strike their beallie with their foote: The remedie, is Hartes horne, Sauine beaten, and giuen hym with a little vineger, in a horne. *Columella* would haue you rake the Horse with your hand and after that you haue plucked out the dounge, to washe his fundament with sea water, or brine. *Brasanolus* in his commentarie vpon *Hippocrates*, declareth how he cured the duke of, *Ferars* Horse, being in greate danger with wormes, by giuyng them quicksiluer, and *Scordium*, or water *Germander*, when no other medecines would helpe. The Reume, or distillation, maketh a Horse slothfull, dull, and faint, yet will he be led, and ridden, and moderate labour is not amisse for hym, let hym drinke warme water with wheate bran: the more filth he voides at the mouth, the better will it bee for hym. There are some diseases thought to bee incurable, whiche if the Horse had, and was solde, by the old lawes he was to be turned backe againe, except the bargain were other wise: of whiche number are the broken winded, the lunaticke, and the manginess, called the farcine, whiche disease if it come once to the stones, is thought incurable, to this thei ad the through splent: some think the broken winded is not to be cured, because it is like to the consumption of the lunges in a man yet some hope of recouerie there is, if it be taken in tyme: for lettyng of blood in drie diseases, is against reason. But you maie anoint the whole bodie with Wine and Oyle, mingled together & warmed, and currie him against the heare till he sweate and giue hym this drinke inward from the first daie: the iuice of *Osian*, Swines grease clarified, and *Amilum*, in newe sweete wine, which being boyled together, you maie giue it him with a horne, to open his pipes, and set hym so as he stande warme. The lunatike eyes, are cured by lettynge hym blood in the temple vaines, bathyng the eyes on the outside with some warme bath and puttyng into the some strong water certaine daies, till thei be hole. For the manginess, take the wormes called *Cantharides*, beatyng them, and mingle with the a little Uerdegrease, and so annointe them with it, warming the bodie of the Horse

Q.iiiij.

with

ruled for a
broken winded
horse

The third Booke

with a firepanne. Others vse to washe hym with warme water twice a daie, and after, to rubbe hym with salt sodden in water, till the matter come out. Aboue all other thei saie it excelleth, in the begimpyng to annointe hym with the fatte of a Seale: If it haue runne long, you muste vse stronger medicines, as Lime, Brimstone, Tarre, old Swines grease, of eche a like quantitie, boiled together, and with a little oile made in an ointment: thei vse to rubbe it also with the Soote of a Caldron. Against many diseases bothe of Horses, and Bullockes, thei vse the roote of the hearbe calleh blacke Ellebor, of some Bearfoote, of others Setterwort, whiche thei thruste in the breaste of the beaste, betwixte the fleshe and the skinne, makynge a hole before with a Bodkine. Again, all diseases of Horses, *Vegetius* commendeth this medicine as the cheefest: Centorie, Woymeewood, Dogfenell, wilde Tyme, Sagapen, Betonie, Saxafrage, *Aristolochia rotunda*, take of eche a like, beate them small, and sift them and if the Horse haue an Agewe, giue it hym with water, if he bee free, with good strong wine. The olde Housebandes would not suffer their Horses to bee let blood, but vpon greate necessitie, least beyng vsed to it, if it should at any tyme be omitted, it should breede some disease: and therefore in very young Horses, and suche as bee healthie, it is beste not to let them blood, but in the roole of the mouth. For those that be come to their full age, you maie lette them blood before you put them to pasture, but beware you beare a steddie hande, and strike them not to deepe: Geldynges you shall not neede to let blood, the Horses of *Barbarie* (as thei saie) netter neede any medicine.

EUPHOR. You haue spoken penough of Horses, it is tyme you saie somethpyng of Asses.

Asses.

HIPPO. It is greatly out of order, but since you will nedes haue me so to dooe, I will not sticke with you to saie what I can therein, that eche of you maie dooe the like in hys charge, Asses are commonly kept, yet not to bee little set by, because of their sondrie commodities, and the hardnesse of their feedyng, for this poore beast contentes hymself with what meate so euer you giue hym, Chistles, Briers, Stalkes, Chaffe, whereof e- uery Countrie hath store, is good meate with hym: besides, he

maie

I promissall +
 medicin against
 all diseases in
 horses.

maie best abide the ill lookyng to of a negligent keeper, and able to sustaine blowes, labour, hunger, and thirst, beyng seldome, or neuer sicke, and therefore of all other cattell longest endureth: for beyng a beaste nothyng chargeable, he serueth for a number of necessarie vles: in carryng of burdens, he is comparable to the Horse, he draweth the Cart (so the lode be not vnrasonable) for grindyng in the Mill he passeth all others, therefore in the contrie the Ass is moste needefull for carryng of thynges to the market, and Corne to the Mill. In Egypt and Barbarie (where the ground is very light) thei haue also their vse in plowng: and the fine Ladies of the countrey doe ride vpon Asses richely furnished: yea, thei bee very apt to bee taught, so as at this daie in *Alcaire* you shall haue them daunce very mannerly, and keepe measure with their Musitian. *Varro* maketh mention of two sortes, one wilde, whereof in *Phrigia* and *Lycaonia* there are greates store: the wilde Asses that are tamed, are passing good, specially for breede, & they are easely broken: the other is tame, of which I meane to speake. The best are brought out of *Arcadia* (although *Varro* seemes to commend the breede of *Italy* for goodnesse.) He that will haue a breede of Asses, must haue the male & the female both of reasonable age, large bodied, sounde, and of a good kinde: the male must be at the least thre yere old, for from thre, till they be tenne, they be fit for breeding: they bring forth their Coltes sometimes at two yeres and a halfe, but thre yeres is the best age: the female goeth as long with her burden as the Mare, and dischargeth in all respectes as she doeth: but she will not very well retyne, except she be forced immediatly after the horsyng to runne about, she seldome bringeth forth two. When she foaleth, she gets her into some darke place, and keepes her selfe from being scene. They will beare all their life time, whiche (as *Aristotle* sayth) is thirtie yeres: they are put to the Horse a little before the tenth of June, and beare euery other yere: they bring forth their Fole at the twelfth moneth. Whyle they be with Fole, they must not be greatly laboured, for hazardyng their Fole: the male must neuer be idle, for he is as lecherous as the deuill, and by rest will waxe nought. The Colt is suffered to run with the damme the first

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first yere, & the next is getly tied vp with her, onely in the night tymes: the third yere thei are broke, accordyng to their vse. The damme doeth wonderfullly loue her yong so muche, as she wil not sticke to come through the fire to it: but the water she dare in nowise come nere, no not to touche it with her foote, neither will she drinke in any strange water, but where she is vsed to be watred, and so as she maie goe & stand drie foote. Thei delight to be lodged in wide romes, and are troubled with fearfull dreames in their sleepes, whereat thei so pawe with their leggs that if thei lye nere any hard thynge, thei hurt their seete: in drynkynge thei scarfly touch the water with their lippes (as it is thought) for feare of wetting their goodly eares, whose shadowes thei se in their drynkynge: no beast can worse awaie with cold then this. If your Asses halt at any time, you shall thus remedy the, wash all the foote with warme water, and afterwarde make them cleane with a sharpe knife, which when you haue doen, take old chamber lye, as hot as maie be, and melt therein Gotes suet: or if you haue not that, ore tallow, & anoint al the seete til thei be hole

EVP H. Thei saie, that betwixt an Ass, and a Mare, is gotten the Mule, as a third kinde, of twoo sundrie kinde, neither resembling the father, nor the mother.

Moiles.

HIPPO. It is very true: as of the she Ass, & the Horse, is engedred the she Poile, but altogether stubborne, and vntreasonable dull. Also of the Mare, and the wild Ass beyng, broken, are bred Poiles that run passyng swiftly, and are wonderfull hard hoofed, but rugged of their bodie, and mischeuous stomaked, yet easie to be handled: the Mares for breede, must not be vnder 4. yerres, nor aboue ten: thei are soled in the twelfth moneth, as horses & Asses are) as Aristotle saith): but Columella saith, their so-ling time is not before the 13. moneth. The female conceiueth (as experiece teacheth) assuredly after the 7. daie: the male doth neuer better horse, then whē he is moste tired. She that conceiueth not before she hath cast her coltes teeth, is taken to be barren, as she likewise that takes not at the first horsyng. Those that are gotten betwixt a Horse and an Ass in old tyme, were called neyars, and suche as were brought forth betwixt an Ass and a Mare, thei called Poiles. The Poiles themselues (thei saie)

saie) do neuer ingender: if at any tyme thei did, it was taken for monstrous, accountyng the cause of their barrennesse, that contrarietie of their kinds, which matter a long tyme troubled both *Aristotle*, & the rest of the philosophers. Though *Aristotle* hath other where written, that *Houles* doe both ingender and byng forth: & with him agreeth *Theophrastus*, affirmyng, that in *Capadicia*, thei do comonly byng forth, and ingender of theselues. The like doth *Varro*, and before him *Dionysius*, & *Mago* affirme, that the breeding of *Houles* in the countreies of *Affrik*, is neither monstrous, nor geason, but as common as our breede of horses: but the *Houle* is both fairer and better stomaked, that is begotten of an *Asse*, and a *Mare*. The stallion that you meane to haue for your race of *Houles*, must bee as faire as you can gette, hauyng onely this regard, that he be large of bodie, bigge necked, broad, and strong ribbed, large, and brabonie breasted, his thighes full of senewes, and his legges well knit, of colour blacke, and spotted: for *Asses* (though thei bee commonly Dunne) yet that colour agreeth not well with a *Houle*: some saie, that what colour you would haue your *Houle* to bee, with that coloured cloke you muste couere your *Asse*. The *Asse* so proportioned (as I haue declared) that you meane to appoint for your Stallion, you must straight waies take from his damme, and putte hym to some *Mare* that hath a *Colte* suckyng of her: you shall easely deceiue the *Mare*, by settyng her in a darke place, remouyng her owne *Colte* from her, and puttyng to her in steede thereof the *Asses Colte*, whiche she will nurse as her owne. Afterwardes, when the *Mare* hath been bled to it a tenne daies, she wil continually after that time giue it sucke. The *Asse* beyng in this order brought vp, will better acquaint hymself with the *Mares*, sometymes though he bee sucked onely with his owne damme, beyng brought vp when he is yong amongst *Mares*, will well penough keepe companie with them (as *Columella* saietly:) but our *Asses* are of them selues desirous enough of the *Mares*, that thei neede not to bee trained to the matter: for it is a woondesfull *Colt* the beaste, and vnrasonably weapned. He must not be lesse then thre yerres old whē he couereth your *Mares*, whiche must be in the Spryng tyme, when you maie well see

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feede him with grasse, & good store of Dates, & Barly: neyther must you put him to a young Mare, for if she haue not been horsed before, she will so beate her woer, y she will make him like the worse as long as he liueth: for remedy wherof, you must at y first put to the Mare a wilder Assle, y maie woe her before, but not suffered to Horse her, & whē you perceaue y she is Horsing, awaie with y raskall, & put to your Stalion. A place fit for this purpose, y countrey people (as *Columella* saith) were woont to haue, which thei called a frame, or a brake, with two rayles one both sides, & a little distance betwene, y the Mare can not strue nor turne from y Horse: the lower part inclosed, and the Mare standing lowe, so the Assle maie the better leape her, hauing the bypper ground for his helpe, whiche when she hath conceaued, & at the twelue months end brought forth, the yere after she must be suffered to run emptie, that she maie the better bring vp her Colte. The she Hogle (being a twelue mōth old) must be taken from the dam, & let run vpon mountaines, or wylde places, for the hardning of his hoofes, & the better enduring of labour, for the Male is y better for burden, & the Female the quicker and liuelier: bothe the kindes doth trauaile well, and till the ground, if the plotwman be not vnreasonable, or the ground so stiffe, as it requireth a draught of Dre, or Horse. They will leaue strikping and kicking, if you vse to giue them wine (as *Plinie* reporteth) who like wise writeth, that a Hoile will line fourescore peres.

EVPHO. Since you haue begumie with trauallyng beastes, what can you saie of the Camell.

Camelles.

HIP. The Camell is cheefly vled in y East partes, which some suppose to be the seruisable cattell for man that is, and as it were therunto onely framed: for he is bñbast vpo the back for bearing of burdēs. Also, he hath foure knees, where as the horse the Assle, and suche others haue but ij: for his hinder legges bow forward as a mans knees doth, wherwith he kneleth to receiue his burden. There are 2. kindes of thē, the *Bactrian*, and the *Arabian*, the *Bactrian* haue 2. bunches vpon their backs, and the *Arabian* but one, and the other on their breast to leaue vpo, both sortes of thē lacke their teeth aboue, as the Bullock doth: thei al serue in those countries for burden, & to car y men in the wars: thei

4. knees.

thei are as swifte as Horses, but some a greate deale more then others: neither will thei breake their pace, nor carrie more burdens then thei are vled to: Thei beare a naturall hatred to the horse, and can forbear drinke for fower daies: he drinks when he maie, bothe for that is past, and to come, troublýng the water befoze with his foote, other wise he delighteth not in it: he is fed beside his pasture, and suche thynges as he gettes in the wood, with Dates, or Barly, and Salte: he engendzeth backward, as the Elephantes, Tygers, Lions, Comies, and suche other, woofe instrumentes growe backward, when thei meane to go to rut, thei seeke the secretest and desartest places that maie bee: neither maie a man at any tyme come neare them, without greate danger. Thei goe with yong a tweluemoneth, and are meete for bzeede at thzee peres olde, and after a yere thei conceiue againe: Thei beare but one at once, as Elephantes, and other greate beastes: thei giue milke, till thei be greate. Againe, (as Aristotle saith) Didymus in his bookes of Housbandrie writeth, that the Camell hath a regard to his blood, as the horse hath, and lieth neither with mother, nor sister. And the female Camell of Bactria, feedyng vpon the mountaines amongst the wilde Boares, is often tymes beamed of the Boare, and conceiue. Of the Boare and the she Camell, is ingendred the Camell with two lompes vpon the backe, as the Hoile is of the Ass, and the Mare, and in diuers thynges resemblith his sire, as in bristled heares, strength, and not faintyng in the mire, but gopyng lustely through, and in carryng double so muche as other Cammells, as the same aucthour saith. The females of them are spaide, to serue the better for the warres: thei liue (as Aristotle saith) fiftie peres, others saie a hundred peres, and are subiecte to madnesse (as Plinie saith) there are a kinde of them called Camelleopardes, that haue the resemblance of two diuers beastes, the hoofes and hinder legges like an Ore, his forelegges and his heade like the Cammell, the necke like a horse, beeyng flecked white and redde. Strabo saith, he is coloured like a fallowe Deare, straight necked, and hye, like an Ostrige, his head somethyng higher then a Cammells.

EYPHOR. I remember I haue seen the like beast for all

the

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the worlde in a peece of Tapistrie with Blacke Hoores, with their wiues and baggage vpon their backes, saue that thei had there little hoznes vppon their heades, like as some Sheepe haue. I thinke *Heliodorus* in his *Ethiopian* storie, did firste describe this beast, but these outlandishe beastes we meddle not muche with.

HIPPO. Go to *Euphorbus*, let vs now see you discharge your parte, accordyng to your promise, and tell vs some parte of your cummyng in keeping your cattell: for next to the Horse in woorthinesse, commeth the Oxe.

Bullockes.

EUPHOR. Since it is so appointed, I am contented to shewe you what I can saie touchyng my poore skill: and firste I mme not suffer the Horse to chalenge the cheefe place, when the old wyters and auncient people, did alwaies giue the *Sarlande* and cheefe praise to the Oxe, as to a good plowman and faithfull seruant: for *Hesiodus*, a moste auncient wyter, and the grauest aucthour of our profession affirmeth, that the famelie doeth consist of the housebande, the wife, and the Oxe. The self same by his aucthoritie doeth *Aristotles* seme to alledge in his *Politickes*, & in his *Economickes*, whiche beast was alwaies of that honour and estimation, that he was condēned in a greates penaltie, who so euer did kill him, beyng a felowe, and cheef helper in our housebandrie. By the woorthinesse of this beast, many greate thinges receiued their names of them: for of the number, beautie, and fertilitie of *Heifers*, did *Italie* (as thei saie) firste take his name, because *Hercules* pursued the noble Bull called *Italus*. This is the cheef companion of man in his labours, and the trustie seruant of the Goddess *Ceres*: in many greate thynges for the roialtie of the Oxe, thei deriued their names fro the Oxe, as in callyng also the Grape *Bumammam*: in fine, *Iupiter* himself thought good to conuert into this shape his sweete daughter *Europa*. Moreover, of a rotten Seere are engendred the sweete Bees, the mothers of *Honie*, wherefore thei were called of the Greekes (as *Varro* saith) *Bulónac*. The same *Varro* makes fouer degrees in their age: the first of *Calues*, the seconde two *Perelynges*, the third *Seeres*, the iiii. *Oxen*, the *Seeres* in the firste, the *Bulcasse*, and the *Cowcasse*: in the seconde, the *Heifar*,

Heifar, and the Steere: in the thirde and fowerth, the Bulle, and the Cowe: The barraine Cowe he calleth *Taurum*, the Milche Cowe *Hordam*, from whence came the feastes called *Hordica festa*, because the Milchkinne were then Sacrificed. The goodnesse of this beaste is diuers, accordyng to the diuersitie of the countrey: the best were counted in the old tyme to be of the breede of *Albania*, *Campania*, and *Toscana*: At this daie wee take the beste kinde to bee in Hungarie, Burgundie, Frislande, Denmarke, & in Englande. Of Bullockes, some are for the draught some for the staule, and some for the plaic: to what purpose so euer thei serue, whether it be for labour, for milkyng, or for feedyng, it is best alwaies to chosse suche as are yong, of lustie age, rather then those that are old and barraine, the woordes of couenaunt in the old tyme (as *Varro* saith) in sellyng of Bullockes, were these: doe you warrant these Bullockes, or Steeres, that you sell to be sounde, of a sounde heard, and without fault: The Butchers that buye for slaughter, and suche as buy for Sacrifices, vse no woorde of warrantise: and though some Bullockes are chosen by their strength, some by the greatnesse of their bodie, yet the best commonly haue these properties: large, well knit, and sounde lims, a long, a large, and a deepe side bodie, blacke horned, though in the colour there be no great matter, yet some mislike the white for their tendernesse, with whom *Varro* consenteth, who would haue them broad foreheaded, great eyed and blacke, his eares rough and heartie, his chawes to be large and wide, his lippes blackishe, his necke well brauned, and thicke, his dewlappes large, hanging doune from his necke to his knees, his shoulders broad, his hide not hard, and stubborne in felyng, his bellie deepe, his legges well set, full of leucwes, & straight, rather shorte then long, the better to sustaine the weight of his bodie, his knees streight and greate, his feete one farre from the other, not broad, nor turnyng in, but easely spreadyng, the heare of all his bodie thicke and short, his taile long, and bigge heard. *Palladius* thinketh, the best tyme for buyyng of draught Oxen, to be in Marche, when beyng bare, thei can not easely hide their faultes, by the fraude of the seller, nor by reason of their weaknesse be to stubborne to be handled. It is best to buy the of your neighbour

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neighbour, least the chaunge of aire and soile hurte them: for the Bullocke that is brought by nere home, is better then the stranger, because he is neither troubled with change of aire, water, nor pasture: if you can not haue them nere you, buye them from some like countrie, or rather from a harder, and be well assured that you bye them euen matched, lest in their labour, the stronger spoile the weaker. Looke besides that thei be getell, skilfull in their labour, fearfull of the goade, & the driuer, not dreedyng any water, or byidge: greate feeders, but softly, and not ouerhastely: for suche doe best digest their meate. In choosyng of Bulles, or Kine, the very like signes are to bee required, saue that the Bull differeth from the Dre, in that he hath a more froweyng and fierce looke, shorter hornes, greater, and thicker neck so bigge, as it seemes the greatest parte of his bodie, his beallie somthyng gaunter, and meeter for Bullyng of Kine. The Bull before he be suffered to goe with the Kine, must bee well sedde with Grasse, Chasse, or Haie, and kepte seuerally by hym self, neither muste he goe to the Cowe, till the tenth of June. *Varro* would not suffer him before the rising of the *Lira*: but *Aristotle* would haue hym all the reddyng tyme to goe in Pasture with the Kine. The Cowe likewise would be hye of stature, and long bodied, hauyng greate Udders, broade forehead, faire hornes, and smoothe, and all other tokens almost that is required in the Bull, specially to bee young: For when thei passe twelue yeres old, thei are not good for breede, but thei liue many tymes farre longer if their Pasture bee good, and thei kepte from diseases. The old Cowe giueth more Milke then the young, accordyng to the countrie peoples prouerbes, old Kine more milke, young Hennes more Egges. Againe, vnder thre yeres old, you maie not suffer them to goe to Bull: if thei chaunce to bee with Calf before, you muste putte the Calf from them, and milke them for thre daies after, leasse their Udders be soze, after wardes forbeare milkyng. *Plinie* writeth, that at a yere old thei be fruit full, but the breede will bee litle, as it happeneth in all to timely ingenderynges. You muste euery yere in these beastes (as in all other) soze your stocke, that the olde that bee barraine, or vnmeete for breedyng, maie be put awaie, solde, or remoued to the

the Plowe : for when they be barrayne (as *Columbella* sayth) they will labour as well as Oxen, by reason they are dyed by, but wee use commonly to fatten them : their age is known by the knottes and circles of their hoines, whiche *Plinie* marketh likewise in Goates. The tyme for goyng to Bull, some take to bee best in the midst of the spring : *Palladius* would haue it in Iuly, for so in the twelfth moneth the Mall Calue, for so long she goeth with Calf (as the common people saye) a Cowe and Quene haue both one tyme. In many places they desire to haue their Cowes goe to Bull a thirtie or fortie dayes after the tenth of Iune, that they may Calue in March, or Aprill: they that would haue muche milke, so order the matter, as their Kine goe to Bull from the Spring, to winter, whereby they alwaies miske some: at once bulling she conceaueth, if she chaunce to fayle, she goeth to Bull agayne within twentie dayes after: some say, if so bee the Bull come doune one the left side of the Cowe, it will be a Cow Calf, if on the right side, a Bul Calf. The Greekes affirme, that if you will haue a Bull Calf, you must knutte the right ston of the Bull, and for a Cowe Calf, the left: *Varro* saith, that if you put the Cowe to the Bull immediatly after gelding, she conceaueth: *Columbella* affirmeth fiftene Kine to be penough for one Bull. I thinke hee will well penough serue twentie Kine, if he bee suche a Bull as I described: if you haue good stoe of Pasture, you may let them goe to Bull euerie yere, but you must beware your Kine be not too fatte, for that will hinder their beeping with Calf. The Cowe shoud when she is redoyng, haue but shorte pasture, and the Bull his bellie full: so shall neither she bee too fat, nor he vnlusty. If the Cowe will not take the Bull, you must stampe sea Onyons in water, and rubbe her vnder the Tayle with it: if the Bull bee not lustie penough about his businesse, take the peeze of a Stagge, burne it, and make it in powder, and with a litle wine and the powder, bath his stoness, and his Peeze withall, which will serue for the like purpose in all ocher beastes (as *Quintilian* sayth) his courage is also stirred vp by the like odours that you speake of for your Hovse. A Bull ought not to leape the Cowe about twyse in a daye as some thinke, but wee finde by experience, that he may

R.s.

ofiner.

The thirde Booke

offer. In some places they haue common Bulles, and com-
 mon Boares to euery Towne: a Bull will ware furious at the
 sight of any redde thyng, as the Elephant, and the Lion, whiche
 can not in no wyse abyde the sight of any white thyng. A Cowe
 wyll geue sucke to a straunge Calf, but let not the Calues
 lye with them in the night, for feare of overlayng them. Some
 weane them at the firste, and suckleth them with Mylke, or
 Wheye, hauing a little Wheye in it, or Flowre, wherewith
 they byng them vp, till they bee able to feede. Whether you
 meane to reare them for breede, labour, or feedyng, you muste
 let them wante no store of good Pasture: for though they bee of
 neuer so greate a breede, yet if their Pasture bee scantie, they
 wyll neuer come to their full growth: for pasture makes the
 beast (as the Countrey people saye.) *Mago*, and the olde hus-
 bandes, woulde haue you to gelde them whyle they bee verie
 young, whiche order wee likewise obserue in cuttyng of them:
 and in the Spring, or at the fall of the Lease, when they bee
 thre Monethes olde, or there about, wee vse to gelde the Bull
 Calues, and spay the Cowe Calues, sowynge by the wounde,
 and anoynting it with freshe Butter. *Calumella* would not
 haue them cutte, but their Stones broken by little and little
 with an instrument, whiche kinde of geldyng hee best liketh,
 because in the little young ones, it is doone without bleedynge:
 for when they be somethyng growen vp, it is better to cut them
 at twoo yeere olde, then at a peere olde, whiche must bee doone
 in the Spring, or at the fall of the lease, the Doone beeyng in
 the Wane: you must tye vp the Calf to a frame, and before you
 cut hym, you must fasten about the Synowes, whereby the
 Stones hang, a coople of small sticke like a paype of Tonges,
 and taking hold therewith, cut away the Stones, so as a little of
 the vpper partes of them may remayne with the foresayd Sy-
 nowes: for by this meanes you shall not hazard the beast by o-
 uermuche bleedynge, neyther is his stomacke quite taken away,
 but hath something of the fater remayning, and yet looseth his
 abilitie of ingendryng. Notwithstandyng, if you suffer hym im-
 mediately by pon this newe cuttyng to goe to the Cowe, it is
 certaine he e maye geat a Calf, but let hym not so dog, for
 feare

feare of bleeding to death. The wounde muste bee annoynted
 with the Ashes of Cines, and Lytharge, and hee must not bee
 suffered the first day to drinke, but nourished with a little meate
 three dayes after he must be dyeted, accordyng to his feeblenes,
 with greene bowes, and sweete grasse cut for hym, and looked
 to, that he drinke not too muche: and if you will, you may an-
 noynt the soze for three dayes with Tarre, and a little Ashes,
 and Oyle, to heale hym the sooner, and to keepe the place from
 flies. You must ble them while they be yet young, so suffer to
 be handled, and stroked, and tyed by to the Danger, that when
 they shoulde come to be broken, they may be handled with more
 ease, and lesse danger: but Columella forbiddes you to meddle
 with the breaking, or labouring of them, before three yere olde,
 and after that: for the one is too soote, the other to late. Those
 that you haue taken by wynde, and be well framed, and propor-
 tioned, accordyng to my paterne, you shall handle and breake in
 this sort. First of all, see that you haue a large roomie, where
 the breaker may easily goe by and downe, and out at his plea-
 sure, without any danger. Before the stable, you must haue a
 saye feelde, that the Steeres may haue libertie penough, and
 not be leard, or haltered, with trees, or bushes. In the stable, you
 must haue certayne stalles, or boordes, poked wylle set by, a seuen
 foote from the ground, to whiche the Steeres may be tyed: this
 doone, choose you a saye baye for the purpose, and takyng them
 by, bying them into the stable: and if they bee unreasonable
 wynde and cutt, let them stand tyed a day and a nyght without
 any meate, to tame them withall: afterwarde let hym that
 keepes them, offer them a little meate, not sidewapes, or be-
 hynde, but before, coryng them all the while, and speakyng gen-
 tly to them, strokyng their backs, and their moosels, sprinkling
 them with a little sweete wine, taking good heed, that they
 sticke hym neyther with head, nor with heele: for if he once get
 that cricke, hee wylle neuer leaue it. Thus beeyng a little ac-
 quainted with hym, you shall rubbe his mouth with Salt, and
 let downe into his thyoate certayne lumps of salt cassioe, and
 powyng after a quarte of good wine, whiche will make hym in
 three dayes, as good a fellowe as you would wishe hym to bee.

R.ij.

Some

The thirde Booke

Some hse to yoke them togeather, & let them drawe same light thing, or plowe in a light plowed ground, that their labour hurte not their neckes. The redyer way of breaking them, is to yoke them with an olde Oxe, that may easely instruct them: if he happen to lye downe in the furrowe, doo neither beate hym, nor feare hym, but binde his feete togeather, and let hym lye, that he may neither sturre, nor feede, whiche being well punished with hunger, and thirst, will teache hym to leaue that sullen trick. The feedyng of this kind of cattell is diuers, according to the diuersitie of Countreys: if there bee store of good pasture in the Countrey, there is no foode to that: in countreys where wanteth pasture, and specially in Winter, hee must bee kept in the Stall, and fed with such fodder as the countrey yeeldes. Where there are Tares to be had, it is the beste feedyng for them: and Hay is very good, Chaffe, and Cooleashes with Chaffe and Hay, and choyt strawe sodde togeather in water, is verie good feedyng for Winter. In some places, they feede altogether with newe thysshed strawe: in many places they geue them Lupines steeped in water, or Chiches, or Beson, mingled with Chaffe: besides, the branches, and leaues of Vines, the greene branches of Elme, Ashe, Poplar, and Holme: in Winter, when other greene bowes faile, the Figge tree will serue, or the brousing of Okes, and Holly. Oxen are soone fatte in good pasture, and with Wheate, Rapes, Apples, and Radishe: Oxen, or Kine, will be passing fatte where there wanteth pasture, by geuyng them Heale mixt with Wheate, Chaffe and Rapes, or Graynes. They will waxe the sooner fatte, in washyng them with warme water, or (as Plinie saith) by cutting their skimes, and blowing in winde to their bellies with a Reede. Solon teacheth, that they will bee fatte, if when they are taken from pasture, you geue them the firste day Colwoortes choyt and steeped in sharpe Vineger, and afterwarde Chaffe, beeyng well cleaned, and mingled with Wheate branne, for the space of fve or sixe dayes, feeding them after with good store of Fodder: in Winter you must feede them at the first Cockrowyng, and agayne when the day beegins to breake: in Sommer first at the breakyng of the day, then at noone, and at night: in Sommer you

you must water them twyse a day, three houres afore Noone, and three houres after: in winter, once a day with warme water, whiche is also thought to bee good for fruitfulnessse: and therefore the Lakes that are filled with Rayne water, are good for them. This kinde of cattell desireth not cleane, or sayre water, but foule and pudled: yet it were better to geue them sayre water. Also, you must prouide them of warme pastures for the winter, and in sommer, verie coole: chiefly Mountaines where they may browse vpon the Bushes, and picke vpon a good liuing among the Woods: but in lowe groundes and neare the Riuer, Oxen are sooner fatted, and Kine geue a greater quantitie of Milke. In Sommer, they lye abroad all the nightes in many places: yea, in England you shall haue them sodred abroad all the Winter. Though they be able to abide colde, yet must you prouide them of large stables, for the succouryng of suche as be great with Calf. Your stables, or Dralls, must stand dry, and be well floored, either with stone, grauaile, or sand: the stone will suffer no water to abide vpon it, the other will soone drinke it vp and drye it: both sortes must be layed slope, that the water may runne away, for roteyng the groundels, and marring their Houses. Let them open toward the South, so shall they bee the dryer, and the warmer: notwithstanding, let your windowes open North and East, which beyng shutte in Winter, and open in Sommer, may geue a healthfull ayre. In fine, as neare as can be, let the houses be neither to hotte, nor to colde, and as drye as may be: *Calumell* would haue two Drhouses, one for the winter, the other for the sommer both vncouered, but well and high walled, for keepyng out of wyld beasts. The Stalls would be eight foote wyde, that they may haue roome yenough to lye in, that the Kine greate with Calf hurt not one the other, nor the stronger Oxe wrong the weaker: and that there may be roome for the keepers to come aboute them, and for pokyng them. *Vitrinius* would haue the Drhouse open towardes the East, and to be neare the fyre: for fyre is naturally beneficall to cattell, both for the dryyng vp of the infectiue dampes, and the keepyng of cattell warme. Besides, by feeling of the fire, they are made gentler, and by the heate thereof, what colde they haue taken in the pastures, is expelled, and diuers inward diseases cu-

The thirde Booke

red. The houses must be scuered with diuers roomes, enclosed and racked, the racke must stande no higher then the Ox may easely reach, and must haue such particions, as one beast begile not the other, whereto they must bee well haltred and tyed, for hurtynge one the other: Care would haue the particions Lattised. Moreouer, it is to no purpose to feede them well, except you also looke too the keeping of them in health, and sound, and therefore whether they be in house, or abroade, you must alwayes haue a speciall regarde vnto them, and to ouerlooke them in the night, specially, if there be any Kine amongst them with Calfe. And though it bee needefull at all tymes to ouersee them, both morning and euenynge, yet most needefull is it of all other tymes to see to them in the spring, when you first put them to pasture: for at that time, by reason of their change of diet, both Oxen, Kine, and Hayfarres, are most in danger of sicknesse: in Winter againe to looke to them, that they be not, for sparing of charges, kept so poore, as they bee utterly spoyled. And therefore you must spare no Litter, specially when they come from labour, to rubbe them, and dreye them, stroking them with your handes, and rasing the hyde from the fleshe, whiche will do them great good. In coming from work, or out of the pasture, you muste wash their feete well with water, before you bring them into the house, that the dirt and filth cleauynge to them, breede no diseases, nor soften their hoofes. Beware of too much cold, or heate, for too much of either, filleth them with diseases. You must take heede they bee not chaste, or chafed up and downe, specially in hotte weather, for that bringeth them to a Feuer, or causeth them to haue a Flire. Take heede also, that there come neither Swyne, nor Doultry neare their stables, for both of them with their downyng, paysoneth the beast. The downyng of a sicke Swine doth breede the Pestilence, or Murraine amongst cattell. You must away with all maner of carrions, and bury them wel for infecting your cattell. If so be the Murraine chance to come amongst them, you must presently change the ayre, and seuer pour Cattell farre a sunder in diuers Pastures, keeping the sound from the sicke, that they be not infected, not suffering them eyther to feede togeather, or drinke togeather. The Pestilence, or Murraine, is a common name, but there are diuers

The Murrin
and his di-
uers kindes,

divers kinds of it: in some *Distaines*, the cattell dyeth and run
both at the nose and mouth, in others againe they be dyd, and fall
away more and more: sometymes it comes in the loynes, and
causeth them to halt before, or behind, sometime in their kidnes,
and appeareth by the weakenes of their hinder partes, wherein
they seeme to have greate paine in their loynes. An other kinde
there is, that ryleth like a *farcine*, with *pimples* ouer all the
body, now appearing, and presently vanishing, and coming out
in a new place. An other sort, betwixt the hyde & the fleshy, wher-
in the humors sweate out ouer parts of the body. Sometime
it is like a *Leprosie*, when all the skynne is full of little pimples,
and sometime a kinde of *madnelle*, wherein they neither heare, nor
see so well as they were wont, though they looke fayre and fat
and lusty yenough. Euery one of these kinds, are contagious and
infecting, and therefore as soone as you perceane them infected,
you must presently put them a sunder for infectyng the whole
stocke, lest you impute that to the wrath of God (as many foo-
les doe, which happeneth through your owne beastlines, and ne-
gligence. The common remedy (as *Columella* saith) is the roo-
tes of *Angelica*, and sea *Thistle* mingled with *Fennell* seede,
and with the honyet. *Clime*, *Wheate* flower, and hot water to
be sprayed vpon them. The common people, when they perceane
either their Horse, or Bullocke sick, or any other cattell els, they
use to take the roote of black *Ellebor*, called of some *Consiligo*, of
others *Bearefoote*, and for a Bullocke, to thrust it in the Dew-
lappe, for a Horse, in the breast, for *Swyne*, or *Sheepe*, through
the eare, making a hole with a bodkin, and thrusting the roote
presently through, whiche the newe wound holdeth fast that it
can not fall out, wherewith all the whole force of the payson doth
straightraies greather, and runneth out in filthy water. *Perfume*
mes in this case (as *Vegetius* teacheth) doe muche good, as
Brimstone, vnsteeked *Lime*, *Garlicke*, wild *Marigold*, and
Coziander seede, layd vpon the Coles, and the Oren so helde, as
they may receaue the smoke by their mouth and nose, that it may
fill their braine, and their whole body with a healthfull ayre. It
is good also thus to perfume the whole body, both for the health
of the sicke, and preseruing of the whole. Before I proceede any
farther, I will set you downe what kind of *Spices*, and what

R.iiiij.

quantitie

Setterwort.

quantitie you ought alwayes to haue in a redinesse for your cat-
till. You must haue one pound of Fenicecke, half a pound of Li-
querille, one pound of Graines, Turnericke, half a pound, or a
quarterne of Bay berries, one pound of long Pepper, half a pound
of Treacle of Grean, a pound of Amisseede, half a pound of Comin,
half a pound of Gadder, Dylamēt, half a pound. The herbe, whose
root you must vse (as I said before) groweth in many places in
woods: it was once brought

unto mee by chaunce from
Darnball in Suffex, by one
Richard Androwes, a good
paine-ful searcher out of such
things: the picture wherof,
I haue here set before you,
for your better knowledge.

For Cruditie.

For beside his present reme-
dyng of Cattell, he serueth
against diuers Diseases in
mā, specially for the Quar-
tane, as the learned *Mathio-
lus* hath in his description of
Plantes mencioned. To re-
turne to my cattell: if they
wante their Digestion, or
chawe not Cud, whiche di-
sease is perceiued by often
belching, & noyse in the bel-
ly, with forbearing of their

meate, dulnesse of their eyes, & not licking of them selues. Take
a handfull of Helitoy of Spaine, as muche of Heartgrafe, as
much of Fetherfew, Sage Horsehound, & Bay salt, three pintes,
of very strong newe drinke: seethe them together three or four
hallops, and geue it hym bludwarne in the mornynge, not suffe-
ring him to drinke, till the afternoone: if you neglect this disease,
so that he be pained in the belly, and full of greefe, he will grone
and neuer stand still in one place. For remedy wherof, you shall
bind his Tayle close by the Rump, as strapte as may be, and
geue hym a Quarte of Wine, with a pinte of the purest Oyle:

and



and after driue him a pace for the space of a myle and a halfe: an-
noynt your hand with grease, and rake hym after wardes, make
hym run againe: some vse to let hym blood in the tayle, within a
handfull of the Rump. There is a disease whiche they call the
Woolfe, others, the Tayle, which is perceaued by the loosenesse
or softnesse betwixt the ioyntes: take the Tayle, and feele be-
twixt euery ioynt, and where the ioynt seemeth to be a sinder, or
is soft and not close as the other ioyntes, there take and slit hym
the longest way vnder the tayle, about two inches long, and lay
in the wound Salt, Soote, and Garlike, and bind it fast with a
cloute aboute it. The Collick, or paine in the belly, is put away
in the beholding of Geese in the water, specially Duckes (as you
said before) of hoxes: for the sight of the Ducke, as *Vegetius* and
Columella say, is a present remedie to this beast. For the Flir, or
the Laske, which in some places they call the Ray, take Sloes
and dype them in powder, and geue it them to drinke: if it be the
blooddy Flir, the old fellowes were wont to cure it in this sort.
They suffred not the beast to drinke in thre daies, and kept him
fasting the first daye, and gaue hym the stoanes of Reazins or
Grapes, dyed and made in powder two poundes, with a quart
of sharpe tarte wine, and suffred them to drinke no other drinke,
and made them eate the browsing of wild Olyue trees, and Ma-
stire trees: and if they mended not with this, they burnt them in
the forehead to the very brayne pan, and cut of their eares. The
woundes, till they were whole, they washed with Dypille: but
the cut partes were to be healed with Oyle and Pitche. If your
Calues haue the Ray or Laske, take sweete Milke, and put
therin the Reinet of a Calfe, make it no thicker but as the Calfe
may well drinke it, and geue it hym luke warme. If your Bul-
locke haue the Cough, and if it bee but beginning, geue hym a
pint of Barlymeal with the yolke of an Egge, the Reazins boy-
led in sweete Wine and strained, a pint: mingle them togeather
and geue it hym fasting. Also graines beaten and mingled with
Floure, fryed Beanes, and meale of Lentills, all stirred togea-
ther, and geuen hym in a mash. *Columella* would haue you geue
them Grasse chopt, and mingled with Beanes that are but a lit-
tell broken in the Hysell, and Lentills small ground, and mingled
with water. The olde Cough they cured with two pound of Hy-
sop,

The Tayle

The Flir.

Laske in
Calues.

The Cough.

The thirde Booke

slope, steeped in thre pintes of water, and mingled with floure, which they made hym swallowe, and after wardes powred into hym the water wherein Hyslope had been sodden, also Reason, with Barly water and sodden Hony, when they had the Cough, and Consumption of the Loonges. To keepe them alieue, they vsed to burne the roote of a Pasell, and to thrust it through their eares, geuing them to drinke, a pint of the wyce of Leekes, with the like measure of Dyle and wine. For the Cough of the Loonges, I vse to geue them long Pepper: Graines, Fenegreke, Bays, Anisseede, Dylament balles, Turmericke, and Hadder, beating them altogether, and seething them in good Ale grounes. If your Calues haue the cough, take Sentury, and beate it to powder, and geue it them. If they haue the Feauer, or Ague, you shall perceaue it by the watring of their eyes, the heauinesse of their head, the driuelyng at the mouth, beatyng of the vaines, and heate of the whole body: let them fast one day, the next day let them blood a little betymes in the morning in the tayle, after an houre geue them a thirtie little stalkes of Colwoortes sodde in Dyle, Water, and Salt, whiche must be poynded fasting into them, fise dayes togeather. Beside, you may geue them the toppes of Olyue trees, Lentills, or any tender brutynges, or branches of Vines, and wipe their mouthes with a Spunge, geuing them colde water thise a day. The blood falling downe into the legges, causeth them (as *Vegetius* sayth) to halt, which as soone as you perceaue, you must straightwayes looke vpo his hoofes, the heate whereof will declare his greefe, beside, he will scarce suffer you to touch it. But if so be the blood be yet aboue the hoofe in the Legges, you shall dissolue it with good rubbing, or if not with that, with Scarifyng, or Pouncing the skinne. If it be in the foote, open it a little with a knife betwene the two clawes, & laye to the sore, cloutes dipped in Vinegar and Salt, making hym a shooe of Broome, and be well ware he come not into any water, but stand dry. This blood, if it be not let out, will breede to matter, whiche will be long eare it heale: if it be opened at the first with a knife, and made cleane, and after cloutes dipped in water, Salt, and Dyle layd to it, and at the last annoynted with olde Swynes grease, and Goates suet boyled togeather, it wyl quickly be whole. This disease, as I take it, the countrey people

call

The Feauer.

Haltynge.

call the Fowle, or the Wilspe, whiche they sometime cure with
drawing a Rope of strawe, or heare, through the Cleese, till it
bleede, or by searing of it with a hotte iron. If the blood be in the
lower part of the Hoofe, the uttermost part of the Cleese is pared
to the quicke, & so the blood let out, and after, the foote wrapped
with cloutes and shooed with Brome, you must open the Hoofe
in the middell, except the matter bee ripe. If he halte by reason
of the Crampe, or paine of the sinowes, you shall rub his knees,
thighes and legges, with Salt and Dyle, till he be whole. If his
knees, or ioyntes be swollen, they must bee bathed with warme
Vinegar and Linseed, or Oplet beaten and layd to it, with wa-
ter and Hony. Also Spunges wet in hot water, and dried again,
and annointed with Hony, are very good to be layd to the knees:
if vnder the swelling there bee any humour, Leauen, or Barly
meale sodde in water and hony, or sweete Wine, must be layd to
it: and when it is ripe, it must be opened with a knife, and healed
as before. All greefes generally, if they be not broken, must bee
dissolued whilst they are newe, with bathes and fomentations:
and if they be old, they must be burned, and the burning annoynt-
ed with butter, or Goates suet. If he haue hurt his heele, or his
Hoofe; Stone PITCH, Brimstone, and greasie Wooll, must bee
burnt vpon the soze with a hot iron. The like must be doen when
he is hurt with a Stub, a Thorne, or a nayle, being first plucked
out, or if it be very deepe, it must be opened wide, with a knife,
and so handled: for kided heeles, take and cast him, and binde his
legges fast togeather; then take your knife, and cut it out as nye
as you can, and let him bleede wel: then take a peniworth of Ver-
degrease, and the yolke of an Egge, and temper them well to-
geather, and bind them close to the place, and he shall heale. If
the Udder of your Kine do swell, you shall bath them with Iuie
sodden in stale Beere, or Ale, and smoke them with Hony Coa-
mes, and Camomell. If the Bullockes feete bee neare worne,
and surbated, wash them in Dre pisse warmed, & kindling a few
twigges or sprays, when the flame is doone, cause hym to stand
vpon the hot Imbers, and annoynt his hornes with Tarre, and
Dyle, or Hogges grease. They will neuer lightly halt, if after
they haue ben laboured, their feete be washed well with cold wa-
ter, and afterwarde their Pastorns, and places betweene the
Clees,

The thirde Booke

Skabbes.

Clees be rubbed with old Swines grease. The skabs or manginelle, is gotten away with rubbing them with stamped Garlike, whiche also cureth the biting of a madde Dogge: besides, Penicill and Brimstone, beaten and boyled with Oyle, Vineger, and water, and after whilst it is warme, a little Alom made in powder and cast into it, doth cure the skabbe, beeing annoynted in the sunshine. Other vse to annoynt them with Butter and Bullockes pisse: and some againe take Rozen, Tarre, and wine and vse it as a Pultesse. Hydebound: is when the skin so stickes to his backe, that you can not take it vp from the ribbes, whiche happeneth by suffering hym to take colde after his swette, or if after his labour he bee wette with rayne, or brought lowe with sicknesse: whiche, because it is very dangerous, you must looke, that when they come from their labour, and are hott, you sprinkle them with wine, and geue them some peeces of fatte or suet. But if they be already Hydebound, it is good you seeth some Bay leaues, and with the warme decoction thereof, to bath his backe, and to rubbe hym all ouer with Wine and Oyle mingled together, and to lift and plucke vp the skinne round about, and that abroade, while the Sunne shineth. If his bleeding stanche not after the cutting of the haire, the remedie is to lay his owne doung to the place. A common medecine for all diseases, as Vegetius reporteth in this: the roote of a sea Onion, the roote of the Popler, and the common Salte, of each a sufficient quantitie, lay them in water, and geue it your cattell to drinke tyll they be whole: whiche also beeing geuen in the beginning of the spring, for the space of fourteene dayes, preseruech them from all sicknesse. Nowe that you haue heard in what sort the olde husbandes did remedie the diseases in their cattell, I shall breuely declare vnto you the remedies that are obserued in sundry diseases at this day, whereof I haue chopt in some amongst the medicines before. Firste for the Burraime: it becommeth at the firste in the throte, and swelleth in the head, and rotheth with much noyse in the throte, whereby it is perceived: take a quart of newe Milke, halfe a peniworth of Butter, a peniworth of Garlike, two peniworth of English Saffron, twoo peniworth of Cinamon, two peniworth of Turmericke, a quantitie of Hearbegrace, a quantitie of Vicrony, mingle them altogether, & geue it him warme: then

Hydebound.

For the
Murreyne.

then take an Alle, and thrust the toppe of his nose vptwarde, take but the verie toppe to thrust through, and not to the headwarde, then let hym blood in the necke almost a pottell, if hee bee able: saue the blood and let it stande, if it change, he may liue, if not, hee dieth. An ocher for the same. Where hee swelleth about the iawes and by to the eares, open him vnder the iawes to the roote of the tongue, and get in your finger, and open it a good wide-nesse, then take a good peece of rustie Bacon, and a handfull of Raggetwort, stampe them well togeather, and fill the hole full with it: then let hym blood at the Nose, and the tongue. A drinke for the same. Take Tansie, Hearbegrace, Longwort, Hysope, Tyme, of each a like quantitie, halfe a handfull, stampe them, and make a quart of good Ale groundes, and seethe them a wallope, or two: take and straine it, and put the licour into a vessell, put therinto a peniworth of Graines, a peniworth of long Pepper, a peniworth of Oylment, and a peniworth of Fenegreke geue it the beast luke warme. The sicknesse of the Loonges is perceiued, if the Dewlappe be hard closed togeather very farre vp, also in hard feeling the Hyde vpon the backe, it cracketh or snappeth much: also a short husking, and thrusting out of the tongue with all: if it be muche perished on the left side, he is incurable, whiche you shall perceiue by the Hyde, whiche will sticke faste ou that side, and like wyle the Dewlappe, if he bee farre gone, he will grone much. The remedie for this disease, is to take long Pepper a peniworth, round Pepper as muche, of Graines two peniworth, of Turmericke two peniworth, of Fenegreke two peniworth, of Pace ashmuche, Cloues a peniworth, of Annisseedes a peniworth, of Madder two peniworth, of Triacle of Seane, the vtter rine of Wallnuts dyed, and made in powder, Juniper berries powdered, Dre Loongworth, Fetherfewe, Hearbegrace, Tansie, Horse Mintes, Bay berries powdered, a peniworth of Garlike, a quarte of Chamberly, a pinte of Salt, a quantitie of Butter: Setter hym before, or immediatly after this medicine geuen. The order of Settring a Bullocke is this, Take Setterwort, otherwile called Bearfoote, and Garlike like quantitie, peele and stampe the Garlike, and pare the Setterworthe cleane, and wray them wel in Butter, then cut the Dewlap two inches

For the
loonges.

Settring of
cattell.

The thirde Booke

inches behinde the sticking place, to the brestwarde, and cut it as long wise about twoo or thre inches, and pull the Dewlappe with the finger, or with a sticke, rounde about one side from the other, as much as you can possibly. Then put the Setterwoyte, Garlike, and Butter, as muche as thou canst well put in, and thus doo on both sides the Dewlappe, then rowle hym so that the Scryng may goe through bothe Holes on bothe sides the Dewlappe, alwaies remembryng to cut the Dewlappe a hand-broade, or aboute the bottome, and in any wise to rent hym to the bottome, before you put in the medecine. The thirde daye after the Settring looke to them, open the wounde, and let out the corruption (if it be come downe) if not, put in more of the medecine, and turne the Rowle: and if it be muche swollen and hard, and will not rotte, take a hotte yron, and take by part of the soare, the Skinne, and the flesh, in such place as thou seest most conuenient, so as it come not to the bone, and thrust the yron throughe on the one side, and on the other, or once right vnder, if the swelling be right beneath, and tarre hym well if the flies be busie. Whiche flies if they chaine to get into the soare, take a Cloth or Towell, and lappe it about a Sticke, and put it into skaldyng hotte Tarre, and so among the Dagottes, searching euery corner well. After you haue pearced him with the hot iron, remember to take a little sticke, and Towle, and dipping it in Sallet Oyle, or Wooll Oyle, to rubbe the hole where the iron passed. The sicknesse of the Gall, is knowen by the runnyng eyes, if he haue muche yallowe careware, it is also discerned by the browne yallowes vnder the vpper Lippe: the cure is this. Take Chamberly, good Ale groundes, or Beere groundes, hard Soote in powder, Gallwort, beastes Loongwort, Plantain leaues, Heartgrace, Hempseede, or Hemp toppes, Garlick stamped, a peniworth of *Aqua vita*, for a greate Bulloche, take almost a quarte of this medecine, for a small Bulloche, lesse: when he hath drunke, take Salt, Lome of the wall, and leaue- ned bready, and rubbe well his tongue, and all the roofof his mouth: then washe his backe, and chafe it well with Chamberlye lukewarme: geather all these hearbes in Sommer, and keepe them, and make them in powder. This medicine serueth likewise

The Galle,
or Yellows.

like wise for the Loonges. If a Bullocke bee diseased in the Liver, he complayneth fyrst in the Legges, whiche will so greue hym, that he shall not be well able to stand, though he be in good liking: the remedy is this. Take a quart of good Ale (if it may be gotten) if not, take Beere, put therein Liverwort, a good handfull, Woorme wood as muche, a peniworth of Garlick, halfe a peniworth ofadder, a peniworth of round Pepper, as muche long Pepper, a peniworth of Cloues and Pace, a peniworth of Trepacle, mingle them togeather, the hearbes beeyng poudred, and geue the beast a drinke lukewarme. The signes of the Blayne, are these: swelling about the face, and the eye, and somewhat in the body: if it bee in the bodie, it swelleth muche there, the onely remedy is. Take and searche him in the mouth, if you perceiue blisters under the rootes of his tongue, or other place thereabouts, then cut them to the bottome, and let them out, and rubbe the place with Salt: searche hym also for the body at the Fundament, by the arme or hand of some young stripping: and when his arme is in as farre as he can, let hym turne his hand upward, and feele for the blaines, or blisters, and breake them with his Nayles, pulling them quite out: see that he annoynt his hand well with Grease, or Sope. There is a disease called the Sprenges, wherein he will smite his head backwarde to his Belly, and stampe with his Legges: you must put your hand into his fundament, as farre as you can pul out the dounge, then shall you finde blood, pull the blood quite out, and take a good handfull of Bay salt, and put it in at twyse: as farre as you can: if he haue this disease, hee will swell in the body, and couet much to dounge. If he haue the Staggers, he will looke very red about the eyes, and cast his head backward: take the fourth part of an ounce of Pepper, broose it, and take halfe a pint of Sharpe Clinger warmed blood warme, and powre it into his Nose: thys, and hold his heade well upward, and let hym blooe at the Nose. If your Bullocke turne round, and haue the Dasie, you shall take him by the head, and feele vpon his forehead, and you shall feele it with your thumbe: cut the skinne crossewyle right in the place, and wype away the blood as it doth encrease with a cloute, and binde a clothe ouer his head, and keepe it warme.

For the Liver

The blaine.

The Sprenges

The Staggers

The Dasie.

If

The thirde Booke

Pissing of
blood.

Panteys.

Taynt.

Hydebound.

Gargyle.

For all disea-
ses.

If your Oxen pisse blood, keepe them foure and twentie houres from water, and then geue to euery one a little dishfull of rennet curdes in a quarte of milke, let them not drinke in foure houres after. There sometime runneth a blood vpon the backe of a Bullocke, which will make hym drawe his legges after him, and go as if he were swayde in the Chyne: cut of a ioynt, or two of his tayle, and let him bleede: if he bleede too much, knit his tayle or seare it. If he haue the Panteys, he will pant muche, and shake in the Flanke, and sometyme shake downe: giue hym a little Rennet, with Spote and Chamberly. If he swell of the Taint, or Stingworme, geue him Urine, Salt, and Triacle to drinke: if he bee Hydebound, stampe the leaues of Floedelife, straine them, and geue the beast to drinke: if he chaunce to haue a stroke in the eye, take the iuyce of Smallege, Fenell, and the whithe of an Egge. The Gargyle, is a swelling beside the eye vpon the bone, like a Botche, or a Baple: if your Bullocke haue it, cut of rounde about it peeces of skinne as brode as a Groate, then cut also rounde about those peeces, one narrowe lappe of the skinne, which will keepe the disease from his lippes, for if it come to his lippes, it is incurable. Then take Chamberly, and Salt, and seeth them togeather, and washe the places where the skinne is cut of, and wash it therewith euening and morning, till the swelling be gone, skraping of the skabbes, and other filth at euerie dressing to the quicke, tyll the swelling be gone, not sparing it, so long as it watreth & runneth: when the swelling is cleane gone, take Heruall and Hony, boyled togeather blood warme, and annoynt all the sayde places, whiche will both heale it, and cause the heare to come agayne. We haue certayne medicines besides, that we vse generallly for all diseases as this, whiche is very so- ueraine: take a handfull of beastes Loongwort, a handfull of o- ther Loongwort that serueth for the pot, a handfull of inwarde rpe of Elder, a handfull of Rewe, chop them small, and put them into a pottell of good Ale, let them seeth tyll they be soft, then styre them, and put into the licour a Pennyworth of long Pepper, a Pennyworth of Graines, a Pennyworth of Liqueryle, a Pennyworth of Aniseede, a halfe Pennyworth of Camen, a Pennyworth of Turmericke, all well beaten, and put into the licour, with

with a quarter of a pound of Madder: and whilst all these doo
 seeth, take a greente bowlevishe, and put therein a handfull of
 Bay salt, halfe a handfull of Garlicke, foure newe layd Egges,
 shelles and all, two ballles of Dylament, grinde all these thinges
 with a Pestell in the Bowle: then take the licour aforesayde
 from the fyre, till it be halfe colde, and put the warme licour in-
 to the Bowle, with the Garlicke, Salt, Egges, and Dylament,
 brewe it well togeather, and geue the beast to drinke bloodde
 warme, or a litle more. An other of the same sorte is this, two
 peniworth of Comen, a peniworth of Graines, two peniworth
 of Annisseedes, a peniworth of Bay berries, a peniworth of Fe-
 netricke, a peniworth of Turmericke, one ball of Dylament, a
 peniworth of Triacle, or rather for the Loonges, three or foure
 spoonefulls of Madder, beate them all to geather, and put
 them in thre quarters of Drinke, set them on the fyre, tyll they
 be blood warme, geue the beast no drinke in the morning before,
 nor tyll noone after in the Sommer, and in the Winter tyll
 night: or if you wyl, you may geue them this Medecine folo-
 wing: take Flint soote, that is hard dyled vpon a Post or roofe,
 and beate it into powder with Salt, then take runnyng water,
 and seethe it, ranke Iule, with the Soote and Salt, and when
 the Iule is soft, take and wring out the iuyce, and straine all to-
 geather throughe a linnen cloth, and geue it your cattell to drinke
 blood warme, in the Spring, and at the fall of the lease. *Bubale*
 called of the common people *Buffes*, of *Plinie Bisonte*, are
 common in Italy, beyonde the *Apenin*: a wyld and sauage
 beast, that for their fearfenesse, are handled with ringes of Iron
 in their Noses, of colour blacke, their bodyes large, and mighty,
 their Legges well set, and knitte verie strong, and in respect of
 their Bodye short, their Hornes large craped, and blacke, their
 heare small and short, their tayles littell, they are in those partes
 used for carriage, draught, and like vses, as the Ox. Of the
 milke of this beast are made Cheese, that about Rome, and
 other places are greatly esteemed: *Columella* countes them too
 her strong meate, and heauie of digestion. Loe here is all that
 for my share I haue to say, touching my cattell: now *HEDIO*
 holde you the candell an other while,

The Buffes.

S. J.

HEDIO.

The thirde Booke

Sheepe.

HEDIO. Next unto the greater sort of cattell, the cheefest place is to be assigned to Sheepe: yea if you consider the greates commoditie and profite, they are to be preferred before them: for as Oxen serue for the tilling of ground, & necessarie vse of men, so is to this poore beast ascribed the safegard of the body, for the Sheepe dooth both with his fleese apparayle vs, and with his milke, and holesome flesh, nourish vs (as the Poet witnesseth.)
*Poore beast that for defence of man, at first created wast,
 And in thy swelling vdder bearest, the myce of daynty tast:
 That with thy fleese kepst of the cold, that should our limbs assaile
 And rather with thy life, then with thy death, dost vs auaille.*
 Of Sheepe there are sundry breedes. The rich and the champion countrey, breedeth a large, and a greates Sheepe: the barraine and the clyff, a reasonable stature: the wylde and the mountaine ground, a small and a weerishe Sheepe. The olde husbandes, did greatly commend the breede of *Milot*, *Appulia*, and *Calabria*, and most of all the breede of *Taranto*, next of *Parma*, and *Modena*. At this day for the finenesse of their fleese, are most in price the Sheepe of England, of Germanie about the Rhine, and of France. *Varro* counsellith all suche as would bye Cwes, to haue their cheefe consideration of their age, that they bee neyther to old nor to young, the one of them not yet come to it, the other already past profite: but better is that age, whereof there is some hope, then where there followeth nothyng but a dead carcasse. Your best is therefore to bye them at two yeres olde, and not to meddle with such as are past thre: their age is to be knowen by their teeth, for the Teeth of the olde ones are worne away: next must you looke, that your Cwe haue a large body, deepe woolled, and thicke ouer all the body, specially about the necke, and the head, and good store vppon the belly: for suche as were bare necked and bellied, the olde husbandes alwayes refused. The necke must be long, the belly large, the legges short, though the Sheepe of England be long legged, the taile in some countrey short, in others very long: for in *Arabia* some haue tayles a cubite long, but woonderfull broade: others, (as both *Herodotus*, and *Eliauns* affirme) thre cubites long, so that the Shepheardes are forced to tye them vp, for beyng hurt with traying

The choyse
Cwes.

trayling upon the ground. In Egypt, a Rammes Tayle hath ben found to weye twentie pound, and more. The Rammie must haue his hornes greate, wynded in ward, and bendyng to the face, though in some place they haue no hornes at all, and yet no better Rammes: the hornes must rather crooke in ward, then growe straight vp. In some countries, that are wette, and stormie, Goates and Rammes are to be chosen, that haue the greatest & largest hornes, whereby they may defend their heads from storme and tempest: and therefore in cold and stormy countries, the horned Rammes are best: in milde and gentle climates, the pold. Beside, there is this incomuenience, when he knowes hym selfe to be armed, he will alwayes be fighting, and vnruly among his Ewes: and though he be not able to serue the turne hym self, yet will he suffer no other Rammie in the flocke, till hee be euencloped and lamed with lecherie. The Dollarde on the other side, finding him self vnarmed, is milder and quieter by much: wherefore the shepherds, to restraine the rage of the vnruly, do vse to hang before his hornes, a little boorde with sharpe prickes inward, which keepe hym from his madness, whyle he perceueth hym selfe to be hurt with his owne blood: others say, that if you pearce his hornes with a Tymble nett to the eares where they winde inward, he will leaue his brawlyng. In some places also the Ewes are horned: but to the Rammie his eyes must be browne, his eares great, his brest, shoulder, and buttocks broad, his stones great, his tayle broade, and long: you must looke besoe, that his tonge be not black, nor pecked, for comonly such will geat blacke and pied Lambes, as Virgil noteth.

Rammes.

*And though the Rammie in sight be white as snowe,
If blacke within his lawes his tongue be wrought:
Refuse hym quite, least if he leape thy Towe.
He doo woe thy foldes with colour nought.*

Bye not your Sheepe but washed and bishrme, that the colour may plainlier appeare: the white colour, as it is the beautifullest so is it the profitabest. In March is your best bying of Sheepe: for shepherdes like suche as haue well waine out the Winter. Whosoever will bee a shepemaister, must regarde the abilitie of his ground: for it is not penough to haue pasture in sommer,

When to bye
Sheepe.

S. is.

but

The thirde Booke

But they must be well provided for in winter: in any wyse, you must haue store of pasture, and better it is, and more profitable to the Master, to keepe a fewe Sheepe well, then a greate number with scarfitie of pasture. *Florentinus* is of that faucie, that he woulde your number shoulde rather bee odde then euē, thinking that number more fortunate, for the healthynesse, and long continuance of the cattell: but these are superstitious toyes, as are a great number of others imagined by the faithfulnessse. Be sure euery yere once, to make your muster, and supply the places of suche as are dead, or sicke, with a newe and sounde number, so that the Master bee not deceiued with an olde vnpromitable flocke. The hardnesse and crueltie of the colde Winter, dooth oftentimes beguile the shepheards, and destroyeth many of his flocke: whereof (presumyng of their strength in the ende of the Sommer) he hath made no supply, and therefore *Columella* is of oppinion, that the age for breede ought not to bee lesse then threē yere, nor aboue eight, both because that neyther of the ages is meete to bee kept: and also that whatsoeuer cometh of an olde stocke, hath lightly a smack of his old parentes imperfection, and proueth eyther to be barrayne, or weake. The selfe same *Columella* woulde haue the Ewes to be put to the Ramme, after they had passed two yere olde, and the Ramme to be of fīue yere olde, and after seuen, to decay. In many places at this day, they suffer both the kindes to breede, from two yere olde, till niene: but before two yeres, it is not good to put eyther the Ramme, or the Ewe to breede, although in most places they suffer the Ewes at a yere old. The Ramme is put by his purpose, by the Wyckers, or Bulryshes, tyed to the Ewes taylor, but more commodiously, by goyng in seuerall Pastures: howbeit, they are commonly seuered, but suffered to goe together. The Rammes that you woulde haue to serue your Ewes, must afore the blossomyng, bee kept in good pasture, for two monethes, whereby they may the better be able to doo their busynesse: but in our countrey, we commonly suffer them to feede together. To encrease their lust, you geue them in their Pasture, the Blades of Dupons, or Knotte grasse: they rather couette the olde Ewes, then the young, because they

Blossomyng

they bee easlyer to bee intreated, and the Rammes them selues in age bee the better. By knytting of the right stone, you shall haue Two Lambes, and of the least, Ramme Lambes: also their blossomyng in the Northwind, geateth Ramme Lambes: and in a Southwinde, Two Lambes. One Ramme (as *Dydymus* affirmeth) suffiseth for fiftie Ewes: when they haue all conceaued, the Rammes must againe bee banished, for dangering and harming the Ewes. During the tyme of their blossoming, they are to be watered in one place (as both *Varro*, and *Plinie* affirme) because the change of water both discoloureth the wool, and dangereth the Lambe. The pollicie of *Iacob* the Patriarch, in procuring of partie coloured Lambes, is well penough known. The best tyme for blossoming, is from the setting of the Beareward, to the setting of the Egle: (as *Varro* and *Columella* haue wrytten) whiche is (as *Plinie* interprettes it) from the third Ides of May, til the thirteene Kalendes of August, other thinke it good all the yere long, many prefer the Winter Lambe before those that fall in the spring, as a creature that of all others, best brooketh his Winter byrth. The thunder, if the Ewes goe alone, makes them cast their Lambes, and therefore it is good to let them goe with company, for anyoing that pertill: they goe with Lambe. 150. dayes, or fve monethes: suche as are afterwarde dammed, are feeble and weake, and suche were of the olde wrighters called Cords: for the most part they bring but one Lambe a peere, yet oftentymes two, and if they bee well fedde, six at a tyme. It hath been seen in Gelderland, that fve Ewes haue had in one peere, fve and twentie Lambes: it may seeme parauenture to many vncredible, and yet not great marueyle, since they haue twise a yere most tymes two, and sometime sixe at a time. The shepheard must be as carefull as a midwife in the peanyng tyme, for this poore creature (though shee bee but a Sheepe) is as much toymented in her deliury, as a shewe, and is oftentymes the more dangerously vered, and payned in her labour, in that she is altogether without reason: and therefore it behoueth the shepheard to be skilfull in medcenyng of his cattell, and so cummyng a midwyfe withall, as if neede require; hee may helpe his Ewe, what danger soeuer happen. The Lambe

as soone as hee is fallen, must bee set on foote, and put to the damme's udder, and oftentimes his mouth held open, the milke must be milked in, that hee may learne to sucke: but before you doo this, you must be sure to milke out the fyrst milke called *Colostrum*, wherof I will speake hereafter: for this, except some quantity be drawen out, doth hurt the Lambe: if the damme dye, you muste suckle it with a hohne: if the Lambe will not of hym selfe sucke, he must be put to it, and his Lippes noynted with sweete Butter, and Swynes Grease, and seasoned a little with sweete milke. As soone as they are lambed, they must be shutte by togeather with their dammes, wherby both the damme may cherishe them, and they learne to know their dammes. Afterwarde, when they begin to waxe wanton, they must be seuered with Wardelles: or (as *Varro* wytteth) after tenne dayes they must bee tyed to little stakes with some gentle stay, for hurtynge of their ioyntes, and waxing leane with too much play. The weaker must be seuered from the stronger, for hurtynge of them. And in the mornynge betymes, before the flocke goe to pasture, and in the euenynge when they be full, the Lambes must be put to their dammes: and when they waxe strong, they must be fedde in the house, with Clouer, and sweete grasse, or els with Branne, and Flowre. And when they haue gotten greater strength, they must be let out with their dammes about noone, in some stumpy and warme Close neare adioynning. In the meane tyme, you must not deale with milkyng of the Cwes, so shall you haue them to beare the more wooll, and byng the more Lambes. When the Lambes are taken from the dammes, good heede must bee had, that they pine not away: and therefore they must be well cherished in their weaning tyme with good pasture, and well kept, both from colde, and extreame heate. Now after that they haue forgotten the udder, that they care not for their dams, then shall you let them feede with the flocke: howbeit in moste places the Lambes are suffered to feede in the flocke togeather with their dammes, & to sucke till haruest tyme, til the dammes them selues doo weane them. *Varro* would haue you not to geld your Lambes vnder fye monethes old, and that in a season neyther too hot, nor too colde: but experience teacheth vs, that the

best.

best gelding is vnder the damme when they be youngest: for in the elder (as in all other beastes) it is dangerous. Those that you will keepe for Rannes, you must take from suche Ewes as vse to haue two at one tyme. The best pasture for Sheepe, is the grasse that is turned vp with the Plowe, and groweth vpon fallowes: the next is that, that groweth in drie Beddowes: the Harshy ground is to be refused, and that whiche groweth nere vnto Lakes, and Fennes: the plaine and the champion feedes and Downes, are beste for the delicatest and fynest woolled sheepe. To be short, the shorter and finer the grasse is, the meetter is it for sheepe: and yet is there no pasture so good, or so sure, but with continuall vse, your sheepe will be weery of, except the shepheard remedy this fault with geuing of them Salt, whiche as a sauce to their foode he must let redy in Sommer when they come from Pasture, in little Troughes of Wood, by licking whereof they geat them an appetite both to their Meate, and their drinke. For where as sheepe wate soonest fatte with watring (as Aristotle affirmeth) you must in Sommer euery fifth day let them haue Salt, a pecke to euery hundred: so shall your sheepe be alwaies healthy, wate fatte, and yeelde you plenty of Milke. Howeuer, against the Winter rotte, or hunger rotte, you must prouide to feede them at home in Cratches. They are best fedde in the warmer countreys, with the leaues and broustinges of Elme, and Albe, and the Hape that is made after Haruest in the ende of Sommer, because it is softest, and therefore sweeter then the other. With what heede and carefulnesse this cattell is to be fed, Virgil declares, who wils a regard to be had of the tymes, both of their watring, and feeding.

When Sommer sayre with Westerne windes dooth call,
 Your lusty flockes, to woods and pasture send
 Betymes, when day doth spring and ouer all,
 The glad some grasse the hoarie dew doth bend.
 From thence when as the fourth houre of the day,
 With losy Sunne dooth make them dry to bee,
 To mallee or waters deepe goe take the way,
 And make them drinke in Troughes of Oken tree.

S. iiii.

But

The thirde Booke

But in the noone tyme, and the heate of the day, you must driue them to the vallies, and shades (as he sayth) a little after.

Wheresoeuer of loue the ancient Oken tree,

His broade and mightie branches spreades, or where:

In sacred Groves of Holmes the shadowes bee

After when the heate is past, you must driue them agayne to the water, and so hyng them agayne to feede.

When Sunne is set, and euening Starre appeares,

That cooles the ayre, and dewy Moone she cheeres.

Varro affirmeth, that they deuoted their pasturynge tymes in Puglia, after this maner. First they put them out to pasture betymes in the mornynge, when as the dewy grasse both farre exceede in pleasantnesse, and sweetenesse: the grasse that beeyng burnt with the heate of the Sunne, is ouer dry. About noone againe, till it wate cooler, they are to be driuen vnder some colde or watry Rockes, and broade shadowed trees, and towarde the euening be suffered to feede tyll sunne set, alwayes hauping regard, that in their dryynge, their heads be from the sunne: for no beast is so tender headed. Within a little after the setting of the sunne, they must be driuen to water, and after, suffered to feede agayne, till it bee darke: for then is the pasture sweetest. This order is to be obserued fro the rising of the seven starres, and the lesser Dogge, till the latter *Aequinoctial*. The like both *Columella* and *Plinie* teache, that after the rising of the Dogge, the flocke must afore Noone bee driuen Westwarde, and feede with their face towarde the West, and after Noone they must be brought agayne Eastward. The feedes whence the Corne is newly had of, is good to pasture them for twoo causes, both for that they are well fedde with the leauinges of the sheaves, and that with the trampling of the strawe, and doungynge, they make the ground richer against the next sowing: but our countrey men doo not well like, that Sheepe should feede vpon the eares of Wheate. The pasturing of them in the other seasons, as winter, and the spring, differs in this point, that they put them not abroad, tyll the sunne haue drawen vp the dewe, and hurtfull vapours of the ground, and so feede them all the daye long, thinking it sufficient to let them drinke at noone: but our husbandes

Canis Stella

husbandes vse not to suffer their Sheepe to feede abroad in the Sommer tyme, neyther before the sunne rysyng, nor after the setting, by reason of the deawe being more hurtfull in sommer, then in winter. In winter, and the spring tyme, they keepe them in the folve, till suche tyme as the sunne haue drawen vp the rymes and hoare frostes from the feedes: for the frostie Grasse at this tyme of yeere, doo stoppe their heades with Rhume, and fylles their bellies full of water: and therefore in the colde and wette seasons of the yeere, it is yenough to let them drinke once a day. Moreouer the shepheard, as also the keeper of all Cattell, must deale gently, and louyngly with their flocke, and comfortyng, and cheering them with synging, and whystling: for the *Arabians* (as *Alianus* writeth) doe finde, that this kind of cattell taketh great delight in musicke, and that it dooeth them as much good, as their pasture. Beside, they must be well ware in the dryuyng of them, and rulyng of them, that they guyde them with their voyce, and shakynge of their staffe, not hurtynge, nor hurlyng any thyng at them, nor that they bee any tyme farre of from them, and that they neyther lye, nor sitte: for if they goe not forwarde, they must stande: for it is the Shepherdes office to stande alwayes as hee as hee can, that hee may plaine and easely discerne, that neyther the slowe, nor the great bellied in lamyng tyme, nor the quicke, nor the liuely, whyle they roame, be seuered from their fellowes: and least some cheefe, or wyld beast, beguile the negligent shepheard of his Cattell. Of their pasturynge, I thinke I haue spoken sufficiently, and therefore I meane now to shewe you of their houses, or sheepcotes, where of there ought to be a speciall regard, that they bee conueniently placed, not subiect to windes, nor stormes, and that they rather stand toward the East, then toward the South. *Columella* would haue them built lowe, and rather long, then brode, that they may be warme in the winter, and that the straightnesse of the roome hurt not the younge. And beside, hee would haue them stande toward the Southe: for this beast (thogh his Garmentes bee warme) can not away with cold weather, neyther yet with the greate heate of the sommer. I haue seen some sheepe houses so framed, as they haue had their gates toward the Southe, and toward

Sheepcotes.

The thirde Booke

toward the East, that they might answer to the seasons of the yere. *Columella* would haue the house sette toward the South, and on the Backside a close Postern, where they may safely take the ayre. You must looke besides, that where they stande, the ground bee made fayre and even, some thyng hanging, that it may bee cleane kept, and that the Urine may bee well boydded away: for the wetnesse hereof doth not onely hurt, and corrupt their fecte, but also spoyleth their Coates, and maketh them rowse and illfauored. Let there therefore bee no moisture, but alwayes well strawed with dye fcarne, or strawe, that the Ewes that be with young, may lye the softer, and cleaner. Let their Beddes bee verie cleane, for the cleaner they lye, the better they feede: let them in any wyse bee well fedde: for a small number (as I sayd before) well fed, yeele more profite to their Maister, then a greate flocke barely kept. You must also haue seuerall partitions to keepe the weaker and the sicke, from the strong and vnruey. And thus muche of housed Sheepe, that are euerie daye brought home, but in some places they are kept abroade, farre from either towne, or house. In Forestes, and vpon wyld feldes and Downes, in these places the shepheard carrieth with hym his Hardsellos, and his Fettes, and other necessities, to folde his flocke with all. In the desarte feldes, when as the Winter pastures, and the Sommer pastures, are distant certayne myles a sinder) as *Varro* saith) he would haue the flockes that haue wintered in *Apulia*, to be kept in sommer vpon the Mountaines of *Kiese*, and *Virgil* thus writeth of the shepheardes of *Lybia*.

What should I here of *Lybian* shepheardes tell,
Or of their pastures wrjt, and dwellinges poore:
That night and day on downes and desartes dwell,
Where wanders still the flocke without the doore,
And on the ground doth lye the shepheard heare,
Whyle he remoues with him continually:
His house, and all his household goods doth beare,
His staffe, his dogge, and all his armory,

The like haue I my selfe scene in Swytherland, and other places of Germany, where the shepheard, lying still abrode with his floeke, foldes his Sheepe in the night with Wardels, tying their dogges about them for watchmen: the shepheard hym selfe in a little house vppon Wheeles, sleepe hard by his charge. The Sheepe of Grece, Asia, and Toranto, and those whiche they call couered Sheepe, are commonly vsed to be kept in houses, rather then abroad, for the excellencie and finenesse of their wooll.

EVPHOR. What tymes doe you appoynt for the shearing of your Sheepe?

HEDIO. The times of shearing, are not in all places one, but vary, according to the disposition of the ayre, the cattell, and the countrey, the best way is to haue good regarde to the weather, as the Sheepe bee not hurt by shearyng in the colde, nor harmed by forbearyng in the heate. In some places they haue two seaisons in the yere for shearing of their Sheepe: the first season for their shearing, is either with the begynnyng of May, or els with the endyng of Aprill: the seconde season of their shearing, is about the begynnyng of September. Suche as doo vse to sheare their Sheepe but once in the yere, doo commonly appoynt for their season, the tenth of the moneth of Iune, about whiche tyme also suche as doo sheare twice a yere, doo sheare their Lambes. Three dayes before you sheare them, you must washe them well, and when they be full dry, you may sheare them: they doo not in all places sheare their Sheepe, but in some places (as *Plinie* sayth) pull them. The old Husbandes did account for the best wooll, the wooll of *Puglia*, and that whiche in Italy was called the Greeke fleese: the next in goodnesse they tooke to bee the Wooll of Italy: in the thirde place they esteemed the *Milesian* fleese: the Wooll of *Pullia* is but short, and meete to bee woyned onely in ryding Clokes. The wooll about *Toranto*, and *Canas*, is thought to bee passing good: but the best at this day, is the Wooll of Englande. The synner your pasture is, the synner (as it is thought) you shall haue your wooll. The wooll of suche Sheepe as are slayne by the Woollfe, and the garnientes made thereof (as *Aristotle* saith)

Shearyng of
Sheepe.

The thirde Booke

is aptest to breede Lyle. If you happen in the shearyng to clip the skinne, you must soothwith annoynt it with Tarre; when you haue shorne them, some thinke it good you annoynt them with the iuyce of sodden Lupines, Lees of olde Wyne, and the dragges of Oyle made in an oymtent, and after thre dayes to washe them (if it be neare you) in the sea, or if the sea bee farre of, with trayne water sodden with Salt. And being thus ordred, you shall not haue them to lose their wooll all the yeere, but to be healthy, and to carry a deepe and a fine fleecle, and therefore, Virgil biddes you,

Goe plunge them oft in healthy streames.

There bee some agayne, that would haue you to annoynt them thre dayes in the yeere, the dayes beyng soone after you haue washed them, with Oyle, and Wine mingled together. Against Serpents, that many tymes lie hid vnder their Cribbes, you must burne Cedar, Galbanum, or womans heare, or Hartes horne: in the ende of Sommer is your tyme for drawyng and seuerynge of them (as I tolde before) when you must sell your Sheepe, that through feeblenesse, they sayle not in the Winter. Beside, killyng one or twoo of them, you must looke well vppon their Liuers, and if the Liuer bee not sounde (for hereby is foreseene the daunger) then eyther sell them, or fatten them, and kill them: for very hard is it to saue them, their Liuers beeing perished. Infected Sheepe, are more subiect to skabbes and manginessse, then any other cattell, which commeth (as the Poete witnesseth.)

When coldest stormes doo wette them neare.

And hoary frostes on ground appeare.

Or if you washe not of the sweate of the Sommer with Salt water, or other wise. If when they be shorne, you suffer them to be hurt with brambles or thornes: or if you put them into houses, where either Horses, Mules, or Asses haue stand, but specially lacke of good feedyng, whereof proceedeth poorenesse, and of poorenesse, Skabbes and manginessse. The sheepe that is infected, is thus knowen: if hee eyther seratche, stampe with his foote, or beate him self with his horne, or rubbe him selfe against a tree: whiche perceiving hym to doo, you shall take hym, and opening

openyng his wool, you shall fide the skine russe, and as it were
itchy: diuers men haue diuers remedies for this malady, but
suche as are not at hand to be had, Virgil thinkes there is no pre-
senter remedie.

Then at the first to chyppe away the sore,

For being hidde, it festereth the more.

Constantine out of Dydimus affirmeth, that the Skabs of Shepe
are healed by washing them with Urine, and after annoynting
them with Byminstone, and Oyle. The common Shepherdes
when they perceiue a Sheepe to fall a rubbing, they straght-
wayes take hym, and shedyng the heare, doo seare the place
with Tarre: others doe teache other remedies more hard to bee
come by, which are not for euery shepherd, nor euery countrey
to vse. And if the whole flocke be infected, it dooth many tymes
so continue, as it shall be acedefull to change houses, and (which
in all other diseases) behoueth both countrey, and ayre. This on
alonely medecine haue I alwayes proued, for the keepyng in
healch of this cattell, to be most present, and soueraine: take the
berries of Juniper, beate them small, and sprinkle them with
Dates, and Salte, mingle them all together, and geue it your
Sheepe, three or foure times in the yeere: for though they refuse
to eate the Juniper berries of them selues, yet for the desire of
the Salt, and the Dates, they will easely take them altogether.
If they be lousie, or full of Tickels, they vse to beate the rootes
of Bayle, and seerhing them in water, and openyng the wooll
with their fingers, they powre the licour, so as from the ridge of
the backe, it runne all ouer the body. Others vse the Roote of
Gandmarke, being well ware that they suffer them not to tast it.
If they haue the Feuer, you must let them blood in the hcele, be-
twixt the two Clees, whiche the Poete teacheth, saying:

It easeth straight the flaming fevers payne,

If in the foote you strike the spinning vayne.

Some let them blood vnder the eyes, and some behind the eares.
The Fowle, a disease betwixt the Clees, is taken away with
Tarre, Alome, Byminstone, and Vineger mingled together: or
pouder of Clerdegres put vppon it. The swelling betwixt the
two Clauers, must be cut with great warinesse, lest you hap to

cut

Lousie

Feuer

The fowle

The thirde Booke

Maister Fyt-
zherbert for
curing of
Sheepe.

cut the woorme that lieth in it, for if you doo; there cometh
from her a hurtfull mattering, that poysoneth the wounde, and
maketh it incurable. Maister Fitzherbert, a Gentleman of
Northamptonshyre, who was the firste that attempted to
wrichte of husbandrie in England, appoynteth this cure: his
wordes be these. There bee some Sheepe that haue a woorme
in his foote, that maketh hym to halce, take that Sheepe, and
looke betwixt his Cleefe, and there shall you finde a little hole,
as much as a greate pinnes head, wherein groweth fine or fire
blacke heares, like an inche long, or more: take a sharpe poynted
knife, and slyete the skinne a quarter of an inche long about
the hole, and as muche beneath, and put thy one hande in the
hollowe of the foote, vnder the hinder Clee, and set thy thumbe
aboue, almost at the slyete, and thrust thy finger vnderneath for-
warde, and with your other hande, take the blacke heares by
the ende, or with thy kniues poynt, and pulling the heares a
litte, and a little, thrust after thy other hand, with thy finger and
thy thumbe, and there will come out a Woorme, like a peece of
fleshe, neare as bigge as a little finger: when it is out, put a lit-
tle Tarre in the hole, and it will shortly mende. If they happen
by the extreame heate of the sunne to fall downe, and to forsake
their meate, geue them the iuyce of the wyld Beete, and cause
them beside to eate the Beetes. If they hardly mawe their
brythe, slyete their eares, and let them bleede. If they be trou-
bled with the cough, Almondes beaten with wine, and powdered
a pretie quantitie into their Nostrilles, remediethe them. A
Sheepe, or Swyne, that hath the Murreine of the Loonges,
you shall helpe by thrusting through their eare, the Roote of
Setterwort: this sicknesse doth commonly spring of want and
skarsetie of water, and therefore (in Sommer time specially)
you must suffer no kinde of cattell to want water. Their legges
if they happen to be broken, are to be cured in like sort as mens
be, beying wrapped first in wooll, dipped in Oyle and Wine,
and after ward splented. The young Lambes, and other Sheepe
also while they goe a broode, are troubled with Skabbes, and
manginess about their lippes, whiche they geat by feedyng vpon
deawey Grasse, the remedie, is Hyssope, and Salt, of each a
like

The murreine of the
Loonges.

Lambes.

like quantitie beaten together, and their mouthes, their Pal-
lattes, and their Lippes rubbed withall: the ulcerous places,
must be noynted with Vineger, Tarre, and Swynes Grease.
If they chaunce to swell with eatyng of any woozme, or vene-
mous grasse, pou shall let them blood in the baynes aboute the
lippes, and vnder the tayle, and after power into them chamber-
ly. If they happen to swallowe a Worsleache, power into them
strong and tarre Vineger warme, or Oyle. Agaynst the murrin-
on, or the rotte, I haue seene geuen them, certaine spoonefulles
of Bvine, and after a litle Tarre: this medecine was vsed by
Maister Iohn Franklin of Chart in Kent, who was in his life
tyme a skilfull husband, and a good housekeeper. In like sorte
haue I seene this medecine. Take for euery soze, one pennyworth
of Treacle; and likewise one litle handfull of Hempsleede,
ground Irie, Elder leaues, and Fetherfewe, as much as a Ce-
nif bale of Lome, and asmuch Bay salte, put therto Chamberly,
and a litle Soote, make it all luke warme, and geue to euery
one thre spoonefulles good, and after euery one a litle Tarre,
before they goe out of hand. In some places they vse to take the
dried flowers of Wormewood, and mingling them with Salt,
they geue them to their Sheepe, as a generall medecine against
all diseases. This medecine is commended by Hieronimus Tra-
gus both for awaying of any paine, and driving away any hurt-
full diseases from cattell.

Fating woar-
mes, or vene-
mous grasse.

Maister Iohn
Franklin.

EXPHOR. Good **HEDIO** forgeat not to speake some-
thing of your Goates.

HEDIO. Goates haue many thinges common with
Sheepe, for they goe to Buck at one time, and goe as long with
young as the Sheepe doo: they perbe commoditie with their
fleshe, their Milke, their Cheese, their Skunnes, and their heare:
the heare is profitable to make ropes of, and packes, and diuers
like instrumentes belonging to seamen, by reason that it ney-
ther rottes with moysture, nor is easely burnt with Fyre.
Verru maketh mention of two sortes of them, a heary sorte,
and a smooth. Suche as haue Ueines, or Wartes vnder
their Chinnes, are taken to bee most fruitefull: their Udders
would bee greate, their milke thicke, and the quantitie muche.

Goates.

The

The thirde Booke

The hee Goate would be softer beared, and longer, his Necke short, his Throte Boll deeper, his Legges fleshy, his Eares great, and hanging: it is thought better to bye the whole flocke together, then to bye them seuerally. At the Chinne of euery one of them hangeth a long beard, which *Plinie* calleth *Araneu*, by which, if any man drawe one of them out of the flocke, the whole flocke (as *amaleu*) stande gazing vpon hym. The hee Goate, because of his beard, and (as *Alunus* sayth) by a certaine instinct of nature, preferring the male before the female, goeth alwayes before his woman. The bargayning for this cattrell, is not after the manner of bargayning for Sheepe: for no wise man will promise that they be free from sicknesse, being as they be, neuer without the Aggrewe; but he assures them that they bee well to day, and can drinke. One thing is to be considered at in this beast, that he draweth not his urine as all other beastes doe at his Nose, but at his eares. The best kindes of them, are those that bying forth twyle a yeere, and suche you must seeke for your breede. The Goate is able to engender a sheuen monethes olde, beeing euen as lecherous as a Goate: for whyle he is yet suckling, he will be vpon the backe of his damme: and therefore he wavereth feeble, and vnable, before hee bee seueren yeeres olde, beeing nowe soked and consumed with his insatiably lustinelle of his youth: and therefore after hee cometh to be fyue yeeres olde, he is no longer to serue your turne for breede. The time when you shall suffer them to goo to rutte, is in *Autumne*, a little before December, that at the commynge of the spring, and blossomyng of the trees, the young may be brought forth. The Goate goeth with young (as *I* sayde) seuen monethes, as the Sheepe dooth: shee bringes forth commonly two, and sometyme three (as *Plinie* witnesseth). Suche as beare twyle, you must keepe for your stocke, for the rearing thereof, and the encrease. As touching their breedynge, you must in the ende of *Autumne* seuer your hee Goates. The young Goates of a yeere olde, and two yeeres, bying forth kindes: but (as *Columella* sayth) they are not to be suffered to bying them up, except they bee thre yeeres olde: and therefore you must away with the young, that the Goates of the fyft yeere may breed, and

and suffer the Kydde of a twoo yeere damme, to sucke no longer then it is meete to be solde. When the Kyddes are brought forth, they must bee brought vp in like sorte as I tolde you of the Lambes: sayng that the wantonnesse of the Kydde is more to be restrained and heedeper to be kept in, and must be fedde beside their Milke, with young bowes. *Plinie* affirmieth, that they be skarse good for breede at three yeere olde, but yf they passe foure, they be starke nought, and that they beginne at seven monethes euen whyle they be vnder the mothers brest. The firste ridyng prospereth not, the second is somewhat to the purpose, the thirde spredeth, shee bringes forth, tyll shee be eyght yeeres olde, and therefore the she Goates, when they be aboue eyght yeeres, is not to be kept: for shee then becometh barraine. Those which wante hornes (as in the male kindes of all others bee the best) for the horned, by reason of theyr weapons, are hurtfull, and vnruely. Besides, the female of suche as lacke hornes, doo geue alwayes greater plentie of milke: but *Columella* (as he commendeth the Sollardes in a temperate and milde Countrey) so in a boysterous and a stormie Region, hee would haue them horned. Suche as haue hornes, doo shewe their age by the cirkels of their hornes: it is thought, that they see as well by night, as by day, and that they alwayes lay their faces turned one from the other, and in that order also feede. Cold (as it is sayde) is verie hurtfull to this kinde of Cattell, specially to those that bee with yong, as likewyse the extreame heate. The witte of this beast *Nurians* reporteth, he once had experience of, whereas a couple of them chaunced to meete vpon a very long and narrowe Bridge, and the straightnesse would not suffer them to turne, and to goe backwarde blindfold in suche a straght, considering the swiftnesse of the streame vnder them, was more vnpollible, the one of them lying downe, the other passed ouer his body. *Varro* dooth commend sundrie little flockes kept seuerall, then greate flockes togeather, vsing for example one *Gaberius*, because a greate flocke is sooner subiect to the murrine, thinkyng ffty to bee penough for one flocke. *Columella* also affirmieth, that there ought not to goe aboue one hundred of them togeather, whereas of Sheepe hee alloweth a thousand

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in one flocke. The byting or byusing of them, is popson to all kinde of Trees, and therefore were they in olde tyme sacrificed to *Bacchus*, because they were so hurtfull to Vines. Their stables *Columella* would haue to stand vpon a stony ground, or els to bee paved, for this beast needeth nothyng vnder hym but a fewe bowes: when hee lyeth abroade, the Shepheard must often sweepe and make cleane their houses, not suffering any dung, or mowsture, to remaine in them, that may bee hurtfull to the flocke: for as I sayde before, they are sceldome without Feuers, and muche subiect to the Pestilence. And whereas other cattell, when they haue the Murrayne amongst them, as soone as they bee infected, beginne to languishe, and pine away: onely these Goates as soone as they be taken, though they be neuer so lustie to looke vpon, suddenly fall downe together, and dye as thicke as Hayle: whiche disease dooth cheefely happen, by too muche ranknesse of pasture. And therefore as soone as you perceaue one or twoo of them fall downe, let the whole flocke blood with as much speede as you may, and suffer them not to feede all the daye, but shutte them by the foure middle houres of the daye. If they bee diseased with any other sicknesse, you must geue them the Rootes of Reedes, and of the great white Thysle, stamping them with Iron Pestels, and strayned with Rayne Water let them drinke it: and if so be this medecine heale them not, your best will be to sell them, or to kill them, and powder them: and when you bye newe, bring them not home to hastily, tyll the disposition of the ayre be altered. If they fall seuerally sicke, cure them in such sort as you do your Sherpe. *Florentinus* saith, if you stampe with water the Gynlard of the Storke, and geue them to drinke a spoonefull a peece, in preserueth both Sheepe and Goate from all murrayne and pestilence. If their bellies be swelled with Water, whiche the Grecians call *υδρετα*, the Dropsie, if the skynne be launced a little vnder the shoulder, it lets out the hurtfull matter, and you may heale the soe with Tarre.

EUPHOR. You haue for your part very well satisfied vs, touchyng the good orderynge of your Cattell: there remaines yet one thyng for you, whiche wee all forgate to speake of, and that

that is the orderyng of Milke, our cheefest foode and sustenance.

H E D I O. Seeing that of this cattell whereof I haue entreated, the profit of the Milke is not small, it is no great reason wee shoulde ouerpasse the orderyng of the same: for Milke (as *Varro* sayth) of all liquid thinges wherewith wee feede, is the greatest nourisher. Milke differeth in goodnesse, accordyng to the nature of the bodie that geue it: as the Milke of *Uolmen*, of *Kine*, *Sheepe*, *Goates*, *Asses*, *Hares*, and *Cammels*: the greatest nourisher is *Uolmans* Milke, the next *Goates* Milke, whereby the Poets saue, that their god *Iupiter* hym selfe, was nursed with *Goates* Milke: the sweetest next to *Uolmans* milke, is the *Cammels* milke: the hollosomest, is *Asses* Milke: the *Ass* as soone as she is with Cote, geueth Milke: the *Cowe*, neuer tyll she haue Caluer: most comfortable to the stomacke, is *Goates* Milke, because hee rather feedeth on *Buttes* and bowes, than vpon grasse. *Cowe* milke is most medecinable, and most of all looseth the belly. *Sheepes* Milke is sweeter, and nourisheth more, but is not so good for the stomacke, by reason it is fatter and grosser. All Milke that is milked in springtyme, is watricher then the milke of sommer, as likewise is the milke of young Cattell: it is hollosomest beyng sodden, specially with the *Pebbles* of the *Sea*. The *Sheepe* about *Pontus*, neare to the *Ryuer Asaco*, doo geue (as *Plinie* saith) blacke Milke. All Milke generally (as *Dioscorides* writeth) is of good nourishment, but filleth the stomacke and the belly, with *Uinde*: that whiche is milked in the spring, is thinnest, but looseth the Belly most. The difference of Milke, is taken (as *Varro* sayth) of the pastures, the nature of the Cattell, and the milking. Of the pasture, when the Cattell is fedde with *Barly*, *Strawe*, and all other hard and drye *Heates*, and this greatly nourisheth. For purging of the Belly, the *Grasse* Pastures, specially where the cattell feede of purging hearbes, as *Cardamus* in his booke de plantis teacheth, that if you will pouрге *Melancholy*, you must feede your myliche *Goate*, or *Ass*, with *Polipodi*, and for all other humours *Sene*, for the *Dropsie* with *Sparge*, or *Agarick*: for cleansing of the blood, with *Funicowe*, or *Hoppes*:

Milke.

Black milke.

Error in the vnderstanding of *Dioscorides*.

T.ij.

and

The thirde Booke

and if you will but onely loose the belly with Mercury, or Sal-
lowes: so farre *Cordanus*. Our countrey men doe cheefely com-
mend for milke, the Pastures where groweth Sperry, and Cla-
uergrasse, and that is all bedeckt with yelow flowers. For the
Cattell, the difference is betwixt the sicke and the healthy, the
young, and the olde: and for the milkyng, that is best, that is
not long kept after the milkyng, nor that is milked immediatly
vppon the Caluing, a grosse vnholosome kind of Milke. To
trye whether milke bee mingled or not, you shall take a sharpe
Rushe, and puttynge it into the Milke, let it droppe from thence
vppon your Nayle, and if the droppe runne abroade, it is a si-
gne there is water in it: if it keepe togeather, it shewes it to bee
pure and good. Of Milke is made Butter, whose vse (though it
bee cheefely at this tyme among the Fleminges) is yet a good
and a profitable foode in other countreys, and muche vled of our
olde Fathers, yea euen of the verie Patriarches (as the Scrip-
tures witneseth) the commoditie thereof, besides many others,
is the aswaging of hunger, and the preseruyng of strength: it is
made in this sort. The milke, as soone as it is milked, is put out
of the Pail into Bowles, or Panes, the best are earthen pan-
nes, and those rather broade then deepe: this doone the seconde,
or the third day, the Creame that swymms aloft, is fletted of, and
put into a vessell rather deepe, then bigge, round and Cylinder
fashion: although in some places they haue other kinde of Char-
mes lowe and flatte, wherein with often beating and moouyng
by and downe, they so shake the milke, as they seuer the thin-
nest parte of from the thicke, whiche at the firste gather toge-
ther in little crombles, and after with the continuance of the vi-
olent moouing, commeth to a whole wedge, or cake: thus it is
taken out, and either eaten freshe, or barrailed with Salt. The
Buttermilke that remaineth of the Butter, is either kepte for
the famely, or geuen to Calues and Hogges, as a daintie foode.
Cheese is also made of the Milke of Cattell, the Milke beeryng
powred into a Vessel of earth, putting into it a little Rennet,
the quantitie of a Walnutte, in a great vessell of milke, where-
by it turneth into Curd. *Vary* doth better like the Rennet of
the Lewet, or the Rynde, then the Lambes: howbeit: we com-
monly

Butter.

Cheese.

monly vse the Calues Remet: others vse sundry other meanes onely with heate, warming it in Tanne vessels, and after dipping these Vessels in colde Water, whiche is the sweetest and cleanliest manner: others put in the seede of wylde Saffron, and being so turned, the Whey dooth greatly purge fleame: others agayne vse the milke of the Figge tree, and then doth the Whey purge both choler and fleame: some turne it with Oximell, or syrope of Vineger, whiche is of all other wayes the hol-somest: some besides, vse the little skime of Birdes Gypsards, and others, the flowres of wylde Thysles, or Martichokes. The newer and better the Milke is, the better wyll bee the Cheese: for made of two sorts of milke, or milke that is to neare steeled, it soone sowreth, and wareth hard and nought, and is not to endure any whyle. Agayne, being made of fatte and newe Milke, it will very long endure, and long continueth in his fatnesse and softnesse: about a two or thre houres after you haue put in your Remet, the Milke commeth to a Curd, whiche is straightwayes put into formes, or Cheesefattes, and pressed: or if they bee but small, they are onely pressed with the hand. If they be of any quantitie, they haue great weyght vpon them, it is very needefull you presse out the Whey with as much speede as you can, and to seuer it from the curd, and not to let it lye slowly drayning of it selfe. Those that make great Cheeses, haue mouldes for the purpose, and Cleughtes and Presses answerable. After this, they take them out of the Presse, and laye them vpon Hardelles, or laye smoothe Tables, in a shadowy and colde place, and close froo all windes, springling them all ouer with Salt, that they may sweate out all their sowrenesse, laying them so, as they touche not one the other. When they bee nowe wel hardened and thickned, they are taken vp, and pressed agayne with greater weyghtes, and rubbed ouer with parched Salte, and after layd in presse agayne, whereby it is thought they will neyther haue eyes, nor be ouer drie: whiche faultes happeneth to some when they be either not well pressed, or too much salted. Some vse to put into the bottome of their Payles, the greene kernelles of the Pine apple, and milking into them, good cause it is to turne. You may also cause your Cheese to relieue of

The thirde Booke

what ſoeuer you will, as Pepper, or any other Spice: but *Columella* countes that for the beſt Cheeſe, that hath leaſt mixture in it. The ſtrongest Cheeſe, and hardeſt of digeſtion, are thoſe that are made of Buffes Milke, the next are ſuche as are made of the Milke of Ewes, but the myldeſt, and lighteſt of digeſtion, are thoſe that are made of Goates Milke: the Cheeſe that is made of mares Milke, is of the ſame quantitie that the Buffe Cheeſe is. There is Cheeſe alſo made of Cammels Milke, and of Aſſe Milke: the Cheeſes that are made of Buffes Milke, are at Rome in great eſtimation of all other cattell. Suche as are touched both aboue and beneath, and haue more then ſoure pappes, you can make no Cheeſe of their Milke, for it will neuer curd. In our dayes, the beſt Cheeſes are counted the Parmasines, made about the Rpuer of Po, eſteemed for their greatneſſe, and dayntineſſe, of whiche you ſhall haue brought into other countreys that way aboue threſcore pounce. Next are commended the Holland Cheeſe, the Cheeſe of Normandy, and the Engliſh Cheeſe. In England, the beſt Cheeſe is the Cheſſhyre, and the Shropſhyre, then the Banbury Cheeſe, next the Suffolke, and the Eſſex Cheeſe, and the verie worſt the Kentiſh Cheeſe. The places where the beſte Cheeſe is made, appeareth by this olde engliſhe *Diſtichon*, better ſenſed, then footed:

Banbury, Langton, Suffolke good Cheeſe, Eſſer go thou by,
Shropſhyre, cum Cheſhyre, Hertford may well with the beſt
peere.

Of the diſcommoditie of Eſſer Cheeſe, our Engliſhe Partiall
John Haywood, thus meerily wytteth:

I neuer ſaw Banbury Cheeſe thicke y enough,

But I haue ſcene Eſſex Cheeſe quicke y enough.

Cheeſe they ſaye will beſte endure, and is longeſt preſerued; if you keepe them in heapes of Pulſe, or Wheate, and if you ſteepe your Rennet in the iupce of Byrche, you ſhall bee ſure to haue neither Wyte nor Creeper in your cheeſe. The Cheeſe that is ſoft and newe, doth more nouriſhe then the dry, and be more comfortable to the ſtomack, not long in digeſting: the old is contrary, according to the proverbe, *No Cheeſe good but the new.*

Dio

Old Cheese will become new in taste, if you lay them in Time, Vinegar, or in Wine: if though age it bee hard and bitter, let it be rubbed ouer with Heale of bndried Barley, and then dipt in water, and after, the outer rinde scraped of. We haue oft times proued, that hard Cheese wrapped in Cloutes wet in Vineger, or Wine, and oftentimes sprinckled with wine, and so layde by, retorne to a softnesse, and a verie pleasant taste. Some lay it in Leauen, coutring it close therewith, and thereby make it soft. It is reported, that *Zordastes* liued twentie yeeres in wildernesse with Cheese so ordered, as it neuer waxed olde.

EKP HOR. Of the Whay that comineth from the Cheese, being sodde with a soft fyre, till the facnesse of the Cheese swim aloft, are made *Wellcurds*.

Wellcurds.

HEBIDIO. You were bound to loue them well.

EVMEVS. I doo in dedde, specially if there be good store of newe milke put into the Whay. The olde wyrters doo teache the making of a kinde of white meate, not much vnlike to *Wellcurds*, which they called *Melcan*, and made it in this sort. Thei put into a newe earthen vessell Vineger, and suffered it to boyle softly vpon the fyre, till the vessell had drunke by the Vineger, and into that vessell thei powred in miske, & set it where it might stand stedfast, whereby they had within a while their desire. But mee thinketh I haue for my part done pensough, it comineth now to your turne **EVMEVS** to goe for ward with the rest.

Melca.

EVMEVS. That the keeping of Swine belongeth to husbandrie, doth evidently appeare by the saying of the auncient husbandes, counting him a slouthfull and an vnchristie husband, that hath his Bacon rather from the Butcher, then from his owne Roofe: for there aryleth as greate profite many tymes to vs of our owne Swyne, as dooth to you that bee keepers of greater cattell of your flockes: for if Bacon bee away, the cheefest supporter of the Husbandmans Kitchin is wanting. And wheras Swines flesh senteth abominable to the foolish Jewes; I beleue verily they neuer tasted the Gamonds of Fraunce, so highly commended by *Varro*, *Strabo*, *Athenens*, and other learned wyrters: which I suppose were no other but the *Flitches* of *Walestphale*; so greatly esteemed at this day, not onely

Swyne.

The thirde Booke

in Germany, but in Rome, and that they were called by the names of Celtick Samonds, because the old wyters, specially the Greekes, called all the countreys on this side the Alpes, both Feuche and Dutche, by the name of Celtyck. Surely there is no beast besides, that makes more dainty dishes; there is in hym neare fiftie different tastes, where euerie other beast hath but one: and hereof came at first the sharpe law of the Censores, forbidding it to be used at suppers, the Cadders, the stones, the trypes, and the forepart of the head of Swyne, (as *Plinie* witnesseth). And mooste apparant is it, that not onely the Frenche, and the Dutche in those dayes, but also the Italians, and the Greekes, nourished greate herdes of Swyne. Among the Greekes, *Homer* maketh mention of one of my name, that had twelue Hogsties, euerie styte conteyning fiftie Pocklinges, and *Polybius* writeth, of more then a thousand to be reared at a tyme among the auncient Italians, Tuskans, and Frenche; *Varro* accounteth a hundred but a small heard. Who so will nourishe Hogges, must haue regard both to the faprenesse, and the age: *Varro* addeth beside, the nature of the kinde, and the countrey. And because the young doe commonly resemble their parents, hee would haue you choose suche as are fayre, and large bodied, and whiche makes most to the matter, as fruitfull as may bee: whiche *Varro*, dooth cheefely commend those that be of one colour, their bystellles would be thicke, hard, and blacke, if it bee in a colde countrey: if in a temperate, you may nourish the smooth. Their proportion would be long, large syded and bellied, wide buttocked, short legged, & footed, bigge necked, and well brawned, short groyned, and turning bywarde, his tayle wyndled. The kinde is most commended, that bringeth many Pigges, the countrey that breedeth large and greate: the best age for the Boare, is a peere old, though at halfe a peere old they are able to ferre a Sow: one Boare is yenough for tenne Sows and more. The Sow is sufficient to bring Pigges at a peere olde, and so for seven peeres after, the fruitfuller she is, the sooner she waxyeth olde: at her fyrste farrowyng, you shall easely see what number she will bring forth: for shee will not muche differ in the other. The best kinde of Sows haue twelue Pappes, the
common

commen in fort tennē, or not so may. Every Pigge dooth knowe
his owne pappe that hee was borne to, and sucketh onely that,
and none other: if you take away the Pigge, the pappe dyeth,
as both *Plinie*, and experience sheweth. They were wont to be
bought and bargained for in this sorte. Doo you warrant that
these Swyne are sound, that I shall well enioye them, that you
will answer the faulces, and that they be of a healthy breede: A
wet moorish ground, is meetest for this cattell, for he delighteth
not in water, but in dirt and myre, so much (as *Varro* writeth)
that the Wolfe, as soone as he hath caught a Sow, draggeth
her to the water, because his teeth are not able to abide the heate
of her flesh. And although this beast will away with any ground,
(for he feedeth both in mountaynes, champion, and marsh) yet
his cheefe deliight is in the Woods that is full of Quagmires,
where there groweth store of Oke, Corke, Beech, Hawthorne,
wylde Olives, wylde Dates, Halsenuttes, Crabbe trees, Plome
trees, and Chery trees: for these doo fruite diuers tymes, and
feede the heards, almost all the whole yeere. Where there want
such Woods, they must bee fedde from the ground, wherein a
Barrie is to be preferred before a dyke ground, that they may
mouell in the Barrie, digge by woormes, wallowe in the myre,
and toombe in the puddels of water, whiche in sommer is most
needefull. They also hunt after rootes, specially f earne rootes,
and the rootes of Bullrushes, Rushes, and Sedges, beside good
Grasse well feedeth a Swyne, and Dychardes of Cherries,
Plomes, Apples, and Nuttes. And notwithstanding all this
the Barne, for you must feede them often by hand, when meate
fayles abroad, and therefore you must preserve store of Acorns,
in Cestones, in the water, or dried vpon smoky f loores, also
Beanes, Pease, and Tares must bee geuen them, and not so
much as Barly spared: for this kinde of feedyng dooth make
them fayne, and not onely fattes them, but geueth the fleshe a
pleasunt tast. When they are yet young and sucke, both they,
and their dammes must be well fedde, they must be put to feede
early in the mornyng afore the heate of the sunne, and after kept
in shadowy places, where there is good store of Water. Afore
they goe to Pasture, they must be meddynged, least the Grasse
fkarre

The thirde Booke

sharre them to much, by whiche they wil be greatly weakened.
 In Winter they must not be put abroad, till the frost bee of the
 ground, and the yse thawed. And though the Sowne will runne
 at the knownen voyce of their Sowneheard, yet Varro will haue
 them be brought both to pasture, and homeward, with the sound
 of a horn: their meate must be geuen them skattered thyme, so
 shall both lesse suffice, and the greater shall not harme the smal-
 ler: as soone as they heare the Noys, though they bee neuer so
 farre of in the Woods, they come runnyng with all haste. Poly-
 bins tellerh, that the Italians vse not to follow their heardes, as
 the Greekes and other doo, but goyng a pretie waye before
 them, they blow their Hornes, their Heardes being acquainted
 with the blast, doo follow them in great order. They doo so well
 knowe and obey the call of the Sowneheard, if we may beleue
Alimus, that when certaine Rovers landing vppon the coast of
 Tuscan, and taking great numbers of them out of their styen,
 caried them aboard, the theeues hauing wayed vp their ankors
 and beyng vnder sayle, the Sowne vppon the hearing of their
 keepers voyce, suddenly ran to the one side of the ship, and over-
 turned her, whereby (the Pirates drowned) the Sowne came
 safe to land to their maisters. As I haue here told you of the con-
 ditions of the Boare and the Sow, and of their keeping, so wil
 I nowe shewe you the maner of their breeding. The breemyng
 tyme is reckoned to be from winter, till the twelfth of March,
 so shall you haue them to farrowe in somer: for the Sow be-
 gynnng foure monethes with pigge, farroweth in the fifth. Shee
 is with pigge at the first breemyng, but they vse to let them goe of-
 ten to Boare, because they soone miscarry. And if you will haue
 two farrowes in one yeere, you must put your Sow to Boare
 in Februarie, or January, that she may farrowe by April, or
 May, when as there is good pasture abroad; and milke is in
 his cheefe strength: and when they bee weaned, they may well
 feede vpon strawe, and grotens, and after, the Sow may far-
 rowe agayne in the ende of *Autumne*: for *Varro* saith, her farro-
 wing times are so diuided for the nonce, as shee may farrowe
 twyse a yeere, whyle she hath foure moneths to beate them, and
 two to feede them. As soone as they be with pigge, you must
 keepe

A wonderful
 knowledge
 in swyne.

keepe the Boare from them: for with his vnrulnesse, hee maketh them to cast. Young Swyne for breede, must not bee lesse then a yere olde, as *Varro* would haue it: howbeit, they begin at eight moneths, and continue seuen yeres. The Boare beginneth at eight moneths, or sixe, and continueth well foure peeres, and after at thre or foure peeres olde you may geld them, and fatte them. Some would not haue you keepe vp aboue eight, others not aboue sixe: not that the Sow is able to keepe no more, but that she that keepeth more, soone faileth. *Varro* reporteth, that the Sow of *Aeneas Lanius*, farrowed at one tyme thirtie white Pigges: but it is monstrous when shee farroweth more then shee hath Pappes. Euery Sow must haue her sty by her selfe when shee hath farrowed, and not suffered to goe with the whole heard, as other cattell are, but little Cotes to be made for them, wherein they may bee kept either farrowing, or with farrowe: for Swine, if they lye togeather in any number, beyng commonly ill manered, doo lye one vpon the other, whereby they hurt such as are with pigge. And therefore you must haue seuerall styes where they may farrowe, & made hys, that the Sow can not geat out: for couered they must not bee by no meanes, that the swineheard may looke that the Sow ouerlay none of them, and to see what they want, that hee may make it cleane, and as oft as hee cleanseth it, he must strawe sand, or suche like, to dry vp the moysture: for though she be but a swinish creature, yet loueth shee to haue her Chamber cleane. When shee hath farrowed, she requireth greater quantitie of meate, whereby she may geue the more Milke, speciallie Barley steeped in Water, or ground & tempered with water. And if you haue not good store of meate, your best is to sell the Pigges: so shall the damme being deliuered of her burden, bee sooner with farrowe agayne. Such as are farrowed in winter, are commonly poore and wretched, both because of the cold, and that their dammes do not like them for wanting of milke, & biting their pappes. If the Sow eate her pigs, it is no wonder, for Swyne of all other beastes, can worst atwaie with hunger, whiche when it prouoketh, they eate not onely their owne, but young children, which not long since happened, in Sussex, to the pittifull discomfort of the Parent.

A childle eaten by a Sow.

They

The thirde Booke

They suffer not the Sow to goe abroade in tenne dayes after her farrowing, except it be to drinke: after, they suffer her to go about the house, that she may the better geue milke. When the Pigges waxe greate, they desire to goe abroade with their dammes, at whiche tyme they are sedde by them selues aparte, to the ende they may the sooner forgeat their Mother: whiche they will doo in tenne dayes. It becometh the swyneheard to be careful and diligent about his charge, that he haue in memory euery one of them, both olde and young, that hee consider euery farrow, and shutte by those that be great with Pigge, that they may farrow in their Stye. He must haue speciall regard of euery young Pigge, that euery one of them bee brought vp vnder their one damme: for if they geat out of the Stye, they straightwayes mingle one companie with an other, whereby the poore Sow is forced to geue milke many tymes, to more Pigges then her owne: and therefore the swyneheard muste shutte by euery damme with her owne Pigges. And if his memory serue not to knowe them all, let hym pitch euery Sow and her Pigs with a seuerall marke: for in a greate number it shall behooue hym so to doo, for confounding his memory. The olde husbands obserued alwayes two tymes in the yeere for cutting of them, the spring, and the fall of the leafe, whereby they auoyded the danger, both of the heate, and the cold. The Boie Pigges they cutte when they were sixe monethes olde, and againe at foure yeere olde, to make them fat, making two woundes, and taking out the stone of euery side: or els when you haue taken out one stone, you must thrust your knife agayne into the wounde, and cutting asunder the skinne betwixt both the stones, drawe out with your fingers the other, so shall you make but one skarre, but this kinde of cutting is somewhat more dangerous. The Sowes are sayd by burning the Partire with an iron, and the skarre healed vp, whereby they will both haue no more Pigs, and be the fatter. Aristotle, following him Plinie, would haue the Sow after two dayes fasting, hanged vp by the fore Legs, and so cut, whereby she will be the sooner fat: but I iudge it better to cut them when they be young, at two monethes olde, or younger, for so are they in least jeopardy. After they be cut, you must keepe

keepe them from drinke, and geue them but little meate: the wound must be annoynted with freshe butter, and sowed up. As the wyppelyng and turnyng vp of the tayle, is a signe of a sounde Hogge, so be there certaine and assured signes of their sicknesse: for if you plucke of the Bristles from the backe, and finde that their rotes haue blood in them, it shewes the Swyne is not well. Besides, if your Hogges be sicke, or taken with a Feuer, they hang their heades a towne side, and suddenly as they runne abroade, they stay, and beyng taken with a turnyng giddinesse, they fall downe: and therefore you must marke well on whiche side they hang their heades, that you may cut the eare of the contrarie side to let them blood: and vnder the tayle beside, two inches from the Roompe, you shall strike the vaine, whiche there is easely to be seen: for the bignes of it, you must first beate it with a little sticke, and after it swelleth with the beatyng, open it with your Knife, and haupyng bledde sufficiently, binde it vp with the rinde of Willow, or Elm: after this, keepe them vp in the house a day or two, and geue them warme water, with a good quantitie of Barly flowre. If the *Quinsy* or *Vnula*, (to whiche disease this beast is wonderous subiect) chaunce to take them, *Dysdimus* would haue you let them blood behinde aboue the shoulders, others vnder the tongue, some agayne cure them with Lettering. If the kernells swell in the thioate, you must let them blood vnder the tongue, and when they haue bledde, rubbe their mouthes within with salt, finely beaten, and wheate flour. *Democritus* would haue you geue to euery Sow, three pound weyght of the beaten Roote of Daffadyll. If they vomite and lothe theyr meate, it is good to geue them before they goe abroade, the Hauinges of Quoy, with fried Salt, and ground Beanes: Swyne whyle they feede abroade, by reason of their great deuouring (for it is an unsatiabable beast) doo wonderously labour with the abundance of the Splen: for remedie wherof, you shall geue them water as oft as they thirst, in Troughes made of *Tamaris*, the iuyce of whiche wood, is very hollesome for them. *Democritus* teacheth to geue vnto Hogges that haue the Splen, the Water wherein the Coles of Heath haue bene quenched. This beast hath sometime a sicknesse wherein he pines away

Of diseases in Swyne, and the cure.

The Quinsy.

The thirde Booke

away, and forsaketh his meate: and if you bypnyng hym to the
 feelde, hee suddenly falleth downe, and lyeth as it were in a deat
 sleepe: whiche as soone as you perceiue, you shall shutte vp the
 hole heard in some house, and make them to fast one day, both
 from water and meate: the next day, the roote of the wyld Cou-
 cumber stamped and strained with Water, is geuen them to
 drinke: whiche as soone as they haue taken, they fall a vomit-
 yng, and so purge them selues. When they haue thus expelled
 their choller, you shall geue them harde Beanes, strained with
 Brine. An excellent medecine against all Pestilence of Swyne,
 both *Hieronimus Tragus* teache, whiche is when you see them
 infected, to geue them the Rootes of *Polipodi*, or Oke Fern
 boyled in Wine, wherby they shall purge what so euer is euill
 from them, and most of all choller, where with Swyne are most
 troubled: the same *Hieronimus* (as I remember) teacheth for a
 Horse (though it bee without my Commission to meddle with
 them, If he bee sicke, and suddenlie fall downe of a disease that
 you knowe not, to put vnder his Tongue a peece of a Fern
 roote, whereupon you shall see hym immediatly boyde upward
 and downeward what so euer is in his body, and presently a-
 mende: this hee sayth (and truly I dare beleue hym) that hee
 proued with a Horse of his owne. But to my Swyne, wheras
 thirst in sommer, is hurtfull and dangerous to all kinde of cat-
 tell, to this beast it is most hurtfull, and therefore you must not
 water them as you doo sheepe and Goates, but twyse, or thysle
 a day: but if you can, you must kepe them by the water side, that
 they may goe thereto at pleasure: for the Swyne is not content
 with drinke, but hee muste often coole and plunge his filchy
 panch in the water: neither delighteth he in any thing so muche,
 as to wallowe in the dirt. And if you haue no such places neare,
 you must draw some water from the Well, and geue it them in
 Troughes abundantly: for except they drinke their fill, they
 will fall sicke of the Loonges; whiche disease is cured (as *Colu-
 mella* wytteth) by thrusting the Roote of *Setterwort* through
 their eares: *Plinius* affirmeth the Towe to bee a present remede
 for the sicknesse of Swyne. Some say, that if a Sow lose one
 of her eyes, shee dyeth soone after: other wyse she liueth fyftene
 yeeres.

peeres. There is a kinde of disease amongst Swyne (though
otherwise they bee healthy and fatte (wherewith their fleshe is all
infected with little graines as bigge as Peason: the Greekes
call them *Chalazos*, and we at this day meafled Swyne, which
you shall sone perceiue by the sight of the tongue, and the hoise-
nesse of their voyce: this disease they say, is naturall vnto them,
from whiche you shall preserue them, if you naye certayne pla-
ces of lead in the bottome of their Trough. You shall also keepe
them from this disease, if you geue them to drinke, the Roote of
Briomp: the generall and common remedie, is Allome, Bim-
stone, and Bay berries, of eache alike: adde therevnto a handfull
of Soote, beate them all together, and put them in a Bagge,
whiche bagge you shall cast into their water when they drinke,
and renue it twise in the yeere.

Meafled
Swyne.

EUPHORA. I pray you **EFMEVS** do not dissemble, but
tell vs truly how you doo to haue your Hogges so fatte. I be-
leeue you are in the Barne sometimes when you should not be.

EFMEVS. What meanes soeuer I vse in ordryng my
flocke, is not to my maisters losse, no more then is your dili-
gence, whereby you bying your cattell to be so fayre. I told you
before, that hee was an vnthysicall husband that had his Bacon
from the shambles, and not of his owne prouision: and besides,
my maisters the Physicians giue great commendations to hoggs
fleshe, in that it hath suche a nearenesse and agreement with our
bodies, neither is there (as I sayde before) a beast that makes
more dishes. And therefore it is greatly for profite, to haue the
husbandmans kitchen whell storied with Bacon, wherewith hee
may sustaine his household all the whole yeere. You shall easely
(though woods be wanting) find Barnes, Parslies, and Corne
seedes to feede them with. They will be fatte (as *Phisic* suppo-
seth) in threescore dayes, specially if they bee kept from meate
three dayes before you feede them: they are fatten with Barley,
Otes, or other Corne, or Pulse, either geuen whole, or ground,
but of all others, best with Mast: and that fleshe is better, and of
more substance that is fed with Acornes, then that whiche is fat-
ted with either Beech mast, or Chestnutte. This beast will in
tyme bee so fatte, as hee will bee able neither to goe, nor stande

Pea

The thirde Booke

¶ *Pea Varro* telles, that there was seene in *Arcadia* a Sowe so fatte, that she was not only unable to ryse, but suffered a Sowle to make her Nest in her body, and to lay her younge there. The same *Varro* reporteth, that there was sent to *Voluminus* a Senator of Rome, a peece of Pork of two Ribs, that wayed thre and twentie pound: the thickeesse of whiche Sow from the skynne to the Ribbe, was one foote and thre ynches. Your best is to put to fattynge your Sowne of two or thre yeeres olde: for if they be younger, their growynge will hynder their feeding. To keepe your Bacon any long tyme, you must vse greate diligence in the saltynge and dryynge of it, whereby you shall haue it both holssomer and sweeter, and besides to continue diuers yeeres to serue the turne, if scarcitie happen. Your Hogge beeyng in this sort fatted, you must shut vp, and not suffer him to drinke the day before you kill hym, whereby the fleshe will be the dryer. When you haue thus after his chyft killed hym, you shall either skalde hym with water, or with a flame made with kratwe, or stikes, sponge hym: for the maner of such as slea hym, I lyke not. After that, hangynge hym vp by the Heeles, you shall plucke out his bowels, and put them to dyessing: his fleshe being cold, and hard, you shall lay vpon a table, and cuttyng out the Head, the Gammon and the fleetches, powder them with salt, chustynge greates store thereof in euery place, specially where the bones bee: this done, put it into your poulderyng tubbe, strowynge salt penough vnder it: some woulde haue you salt in the wane of the Moone. Before you powder it, you must presse and drye out all the blood and the Water. Some before they Salt it, doe plucke out the bones, thinking it the best way for preseruing it, and to keepe it longest sweete. Others agayne doe not straghtwayes put it into the poulderyng tubbe, but doe leaue it vpon a Table for ten dayes after, and then hang it vp in a pure ayle, to drye in the larde. And when it hath been dryed in the wynde certayne dayes, by little and little they let the smoke come to it, and afterwards more abundantly. The Bacon will bee the sweeter, if beside the smoke, the wynde may come to it: if you hang it in greate smoke at the first, it will be rustie. *Dydimus* sayth, that the Bacon will long continue sweete, if after the dyessing, coolynge, and dryynge,

bying, it bee hanged vp in shadowy and moyst places, rather
 toward the North, then toward the South, and that it will bee
 sweeter, if it be couered with Snowe, and Chaffe: the Tubbes
 that you powder in, must bee suche as haue had Dyle in, rather
 then those that haue had Vineger. Although I haue before spo-
 ken of the woorthynesse and antiquitie, of Shepheardes, and
 Heardsmen, yet must I here saie, that it is in bayne to meddle
 with the ordering and keeping of cattell, except you haue hand-
 some, and skilfull men that may take the charge. For the know-
 ledge of keeping of cattell hath a discipline, wherein a man must
 from his very Childhood bee brought vp: and surely it is meete
 that the husband, or Bayliffe, haue ben brought vp, or trayned in
 all these trades, and to come by degrees to his maisters wyze:
 As from a swineheard, to a shepheard, from a Sepheard, to a
 Hecheard, &c. And most true it proueth in this that cometh to
 passe in all other gouernments, that suche are best able to take
 charge of gouernment, that passyng by degrees and offices,
 haue from beeyng vnder gouernment, come to gouerne them
 selues: for though (where the flocke is but small, and feedyng
 not farre of; is brought home euery day) Children, and young
 folkes, are able to serue the turne: yet where the flockes bee
 greates, and must be kept night and day in Forrestes, and wyld
 feedes (as I sayd before) of the flockes that wintred in *Appu-
 lia*, and sommered in the mountaynes of *Kiete*, here I say the
 shepheards must both bee men of lustie age, strength, and dili-
 gence, as also skilfull in that belongeth to their office: for nei-
 ther olde men, nor children, are able to endure the hardnesse of
 climyng the hilles, nor the sharpnesse of the colde Mountaynes,
 whiche they must alwayes doo that followe their flockes, speci-
 ally they that keepe Bullockes and Goates, that delight to feede
 vpon Rockes, and Clynnes, You shall see on the Mountaynes
 of *Swytherland*, great & goodly fellows furnished in warlike
 maner to followe their hearbes and flockes, and to lodge in the
 wyld desertes, farre from the companie of men, and there also
 to make both Butter and Cheese: wherfore such as are meete to
 take charge in these places, must be light, swyft, & well lunnyed,
 and not only well able to followe their flockes, but if neede be to

Of Shep-
 herds.

The thirde Booke

defend them from wild and rauening beastes, to lift great burdens, to followe the chase, and to be good archers: in fine, suche a one as *Homer* doth make his *EVMEVS* to be. And therefore the olde hus bandes in hyring of a shepheard, did alwayes covenant among others, that he should be sound of bodie and limme, and free from filching and theft. In *Slawony*, the heardsmen doo ble to haue their *Wines* abrode with them, as companions of their journey to dresse their Meate, and suche thinges as they neede: suche thinges as are for the health of his beastes, the shepheard must alwayes haue in a redingse. *Varro* would haue him both for this purpose, and for the better order of his reckninges with his maister, to write and reade. Of the number of the heardsmen, howe many euery flocke ought to haue, is to be measured by the countrey, and kind of the Cattell. The same *Varro* alloweth for euerie foure score Goates one shepheard, whiche *Arcticus* alloweth to a hundred, to euerie fiftie Dares two men: in our countrey one shepheard suffileth for a hundred, or two hundred Sherpe, yea many tymes for three hundred, and aboue, specially where they bee euery day brought home. One swyneheard wil keepe twentie, or thirtie Dags, or more, if the ground bee thereafter, the lyke for Bullockes and Kine. For Horses we sceldome haue heardsmen, but euerie man keepeth them at home eyther in stables, or pastures, not commonly exceeding the number of twentie. In what order you shall fede your cattell, either in Sommer, or in Winter, and when towarde the South, and when to the West, I haue tolde you before. The Dogge (though the Lawyer alloweth hym not in the number of cattell) and though he yeeldes of hym selfe no profite, yet is he as the shepheard (for his trustinesse, & watching of the flocke) to be esteemed, and set by: for they haue beene seene to fight in the defence and quarell of their maister. Dea diuers of them haue been knowen after their maisters death, vpon great affection and loue, to samillie them selues, whereupon the price of good Dogges grew to be very great. It is written, that *Alcibiades* gaue for one Dogge, eight score poundes. There is not a more necessarie creature, then the Dogge about Husbandry; for beside his singular faithfulnessse and watching in the night tyme,

be

Dogges.

the 2^d of rane

he is also a quarter master in keeping of the Cattell, and verie needefull for the defence of them: specially Sheepe and Goates, whiche would be soone destroyed by Woolles, Foxes, Grapes, and other vermine, if Dogges were not set to be their keepers, Swyne feeding in herdes, if the wilde beastes invade them, making as it were a *larum* with their grunting and crying, assemble them selues in their owne defence. The greater Cattell defende them selues some with their Hertes, some with their Hornes; onely the poore Sheepe hath no Souldier but the Dogge. Of Dogges that serue for profite, there are but three sortes: for of the fourth (whiche are but for pleasure) I make no account. One of the sortes, is suche as by sent, or shauitnesse serue for the chase, and killing of wilde beastes: these, what manner of ones they should bee, and how they should be bred, Xenophon and Oppianus, in their Cynigerickes haue taught, and I in my last booke, where I shall speake of hunting, will declare. But now I will onely speake of Dogges for the husband, and keepers both of the Houe and the Cattell: and first of the Bando that keepeth the Houe: for this purpose you must prouide you suche a one, as hath a large and a mightie body, a greate and a shrill voyce, that both with his barking hee may discouer, and with his sight dismay the Theefe, yea beying not scene, with the horroz of his voyce, put hym to flyght. His stature must neyther bee long, nor short, but well set, his head greate, his eyes sharpe, and fierie, either browne, or gray, his Lippes blacklike, neyther turning vp, nor hanging too much downe, his mouth blacke and wyde, his neather fawne fatte, and coming out of it of either side a fang, appearing more outward, then his other teeth, his vpper teeth euen with his neather, not hanging too muche ouer, sharpe and hidden with his lippes, his countenance like a Lions, his breast greate, and shaghard, his shoulders brode, his legges large, his tayle short, his feete verie great, his disposition must neyther bee too gentle, nor too curst, that he neyther saue vpon a theefe, nor ste vpon his frends, very waking, no gadder asyde, no launche of his mouth, barking without cause, neyther maketh it any matter though hee bee not swyfte, for he is but to fight at home, and to geue warning of the enemy.

The Bando
for the hous.

The thirde Booke

The Shep-
herdes
Masty.

The Dogge that is for the feld, must neyther be so gaunt nor
swyft as the Grayhound, nor so fatte nor heavy as the Mastif
of the house, but verie strong, and able to fight and followe the
chasse, that hee may bee able to beate away the Woolfe or other
bestes, and to followe the Cheefe, and recover the praye, and
therefore his bodie would rather bee long, then short and thicke;
in all other poyntes hee must agree with the Bandoogge. Tou-
ching the kind, the Dogge is thought better then the Bitche,
because of the trouble shee bringeth when shee is sawte: howbe-
it, the spayde Bitches doo byte sorest, and are more waking.
For their age, they must neither be Whelpes, nor too olde: for
the Whelp can neither defend hym selfe, nor the flocke, where
as yet the olde hath some vse about a house. If you haue a
Whelp (whiche age is better to be trapped, either for the house
or the feld) you shall perceaue by his foote whether hee will bee
great or no. His head must be great, smoothe, and full of baines,
his eares great, and hanging, his eyntes long, his forelegges
shorter then his hinder, but very straight and great, his clawes
wyde, his nayles hard, his heele neither fleshy nor to harde, the
ridge of his backe not to muche appearing, nor crooked, his ribs
round and well knitte, his shoulder poyntes well distant, his
Buttocks fatte, and broade, and in all other partes (as I sayd)
of the Bandoogge before. For his colour it maketh no greate
matter, though *Varro* would haue hym white, and so would *Co-
lumella*, the Dogge for the feld, as hee would haue the House
Dogge to bee blacke: but the pyed colour is iudged nought in
them both. The white they commend, because he may be discer-
ned from the Woolfe in the night, whereby they shall not strike
the Dogge in steede of the Woolfe. The blacke agayne for the
house, is best commended, because of his terrour to the cheefe in
the day, and the hurt that he may doo by night, by reason of his
not being seene: the Dunne, the Banded, and the Redde, doo
not mislike mee, so they be well marked beside. Thus must you
iudging hym as a Lyon by the clawe, either buye one, or byng
up one for your purpose. Howe muche teaching, or bringing up
penuerleth, appeareth by *Lycyrus*, his example in *Xenophon*.
To make them fyerce and curst, you must plucke them by the
eares,

eares, set them together with your handes, and keepe them
from being hurt; so shall you haue them the bolder, and the fier-
cer, and suche as will neuer geue it ouer. You must vse hym first
to the chayne, by tying hym to a clogge, letting him drawe it a
whyle by his necke, and when you haue a little spare vled hym
in this sort, then may you either leade hym, or tye hym: it is best
to keepe them tyed in the day tyme, to make them the curster,
and to let them loose in the night tyme: so shall they in the night
tyme watche, and in the daye sleepe. To arme them against the
Woolfe, or other wilde beastes, you may put broade collers a-
bout their Neckes full of Nayles, and iron studdes, lyming it
with soft Leather within. You must looke that your Dogges
be of a good kind, and (if you can) all of one kinde, so shall they
sticke the better together: choose them that haue the curstest
Dammes, and such as haue their Pappes euen. They begiue
to litter at a peere olde, and continue niene peeres, after tennie
they be woorth nothing. The Dogge (as *Columella* sayth) gets
whelpes lustilie, till he be tennie yeres olde: the whelpes of olde
Curses, are slowe, and nought. *Homer* seemeth to make the life
of a Dogge, aboue twentie yeres, where hee speaketh of the
comming home of *Ulysses*, and the knowledge of his Dogge:
And I mee selfe haue seene Dogges that were saide to bee so
much, but altogether unprofitable. Their age may bee knowen
by their teeth, the yough hauing (as *Aristotle* saith) white teeth
and sharpe: the olde, blacke and blunt. In the Spring they be-
gin to be sawte, and goe with whelpes (as *Aristotle* and *Xeno-
phon* sayth) threescore dayes, or at the most threescore and thre.
Varro wyrteth, that they goe thre moneths with young: the
Dogges of *Lacedemon* ingender at eight monethes olde, and
all other Dogges also at halfe a peere: they are with whelpes at
once limpyng: they litter about Iune: when they bee littred,
they are blind, and the more milke they haue, the longer it is be-
fore they see, but neuer longer then one and twentie dayes, nor
sooner then seuen dayes. Some holde opinion, that if there bee
but one at a litter it will see the nienth day, if two, the tenth
day, and so a day added for as many as be, and that those that be
of the fyrst litter doo soonest see: the best of the litter, is that

The thirde Booke

whiche last seeth, or whiche the Bitch first carrieth to her Kennell. As soone as they be Whelped, cast away such as you mislike: of seuen, keepe three or foure: of three, two: while they be young, at the first they must bee suffered to play with the daine, that they may growe the better, after ward, let them be taught, and tyed (as I tolde you) tying them in the dape, and letting them loose in the night, and suche as you knowe to be of a good kinde, and would haue them proue well, suffer them not to sucke a strange dainne: for the milke and blood of the mother, is of greate force to the goodnesse and growth of the Whelp. And if so be the Bitch lacke milke, suckle them with the milke of a Goate, till they be foure moneths old. Lay vnderneath them in their Kennels Strawe and Chaffe, that they may lye warme: for they can not well away with cold. You must cut the Tayles of the Whelpes, when they be sixe weekes olde, in this maner, there is a Sinnowe that runnes from the ridge of the backe, to the tippe of the Tayle, which being held fast with a Pincer, and a little drawen out, you shall cut a sunder, whereby neyther the Tayle shall growe to any foule length, nor the Dogge shall at any tyme after (as they say, be madde. They are thought to lift vp the Legge when they pisse, as sixe moneths olde, whiche is a signe of the perfectnesse of their strength. The feeding of bothe kindes is all one, they may be fedde with bones, Porridge, and suche like: in any wise let them want no Meate, for if they doo, they will for hunger rauen abroade, and forsake both the house, and the flocke. *Xenophon* would haue you geue them Milke all the peere long, and suche foode as they shall feede with all their life tyme, and no other thing: if you feede them too full, it will breede (as hee saith) diseases in their Legges, and rotte them within. Bread is their common Meate, but *Varro* would haue it geuen either with Milke, or Whay, by vse whereof, they will neuer forsake their Cattell. You may geue them beside, bread, with the Broth of sodden Bones, and the Bones them selues broosed, whiche will make their teeth the sounder, and their Mouthes and Jawes wyder, and they will bee the keener, by reason of the sweetenesse of the Marowe. You must beware they eate no dead Sheepe, least by reason of the taste, they fall to the

the lue ones. Whyle the Bitch hath Whelpes, you must feede her rather with Barly bread, then Wheaten bread: for they prosper better with it, and makes them geue more Milke. You muste feede them thysle a dave, in the morning when you tye them vp, at Noone, and againe at Night, when you let them loose. Their names that you geue them, must bee short, that they may soone heare when they bee called. The Greekes, and the Latines, gaue them names of two syllables, the Germanes lightly but one syllable, as Ball, Slut, Patch, Crym. &c. Although *Columella* would not haue their names vnder two syllables, shewyng for example the names of Dogges among the Greekes, and the Latines, as σκύλαξ, εόμη, αλχη, λάκωνς, and *Lupa*, *Tigris*, *Cerua*: *Xenophon* reckoneth by thousandes all for the most part of twoo syllables. The diseases and greuances of Dogges, are the byting of Flyes, Tyckes, and Manginess. Against this, you must washe them, when they bee Whelpes, with bitter Almonds stamped and strayned with water, washing them both about their Eares, and betwixt their Clawes, that neither Flyes sticke to them and blister them, nor Tyckes or Lye molest them: and if they bee alreadye mangy, you must annoynt them with Tarre, and Dogges grease: the Tyckes also, if you touche them with this Medecine, will presently fall of, for you must not plucke them of by force. If your Dogge be full of Fleas, the remedy is Cammū beaten with a like quantitie of Rensing powder, and mingled with water, rubbe him ouer with it, or the olde dreddes of Dyle rubbed ouer all his bodie. If he be skabby, take *Cythysus* and *Sesamū*, beate them together, and mingling them with Tarre annoynt the soze: this medecine will also remedie a chistian creature. They say also, that if you thrust the skinne through with an Iron, it will heale the manginess, or if you smeare them ouer with Gumme Powder, or cast them into a Tanners Fat. *Aristotle* writeth, that Dogges are chiefly troubled with thre diseases, Madnesse, Quinsy, and the Goute, and whatsoeuer he bytech in his madnesse, becommeth also mad, and dyeth thereof: the madnesse is most extream in the Dogge dayes: what so euer is bitten by them, falleth strayghtwayes into a lothyng, and feare of Water.

Fit names for
Dogges.

The thirde Booke

Madde
Dogges.

Cattes.

To preserve them from it, you must mingle with their Meate for thirtie dayes together, or if they bee already infected, geue them Meeling powder to eate. *Plinie* writeth, that there is in the tongues of Dogges a little woorme, called of the Greekes *Lyrta*, which if it be taken out whyle they be whelpes, they will neither bee madde, nor greedy, or rauenous. If the Dogge bee madde, hee refuseth both meate, and drinke, and driueleth ysa- uoured somie matter, both from his nose, and mouth, he looketh with a lothsome countenaunce, his bodie is leane, and more clong together then it was woont to be, he beareth his tayle betwixt his legges, and biteth without any barking what soeuer he meetes, falling as well vpon men, as beastes, making no difference betwixt his freendes, and strangers. As the Dogge is a watchman and keeper of the house and the flocke, so the Catte is also a household seruauant to bee cherished. The *Egyptians* for their profitablenesse, did wooship for their God a golden Catte, for wheras Rattes and Mice, as wel in Cities, as in Granges, are greatly hurtfull, wee keepe by Cattes for the auoyding of the mischiefe, neither is there a speedier remedie. The Catte is a beast of nature enemy to the House, watching in the night, and sleeping in the day, stealing suddenly and swiftly vppon the House: she seeth better by night, then by day (as *Alexander Aphrodisens* writeth) her eyes shine and glister in the darke. They goe a Catterwalling about Februarie, and other tymes in the yeere (for they often ingender) and bring forth their young ones blind, as the Bitch dooth. *Herodotus* sayth, that after the Catte hath kitned, she cometh no more at the Bucke, whiche when he perceaueth, and can not haue his purpose, he killeth the young, whereof when she seeth her selfe bereft, for verie desire of young (whereof this kind is most desirous) she cometh straight to the Bucke. For my part I would rather counsell you to destroy your Rattes and Mice with Traps, Banes, or Merslets: for besides the sluttishnesse and lothsomenesse of the Catte (you know what she layes in the Dalt heape) she is most dangerous and pernicious among children, as I mee selfe haue had good experience.

Soli deo honor & Gloria.

The ende of the third booke.

The fourth Booke, entreatyng of Poultry, Foule, Fishe, and Bees.

*PVLLARIVS. CHENOBOSCVS.
MELISSEVS. PISSINARIVS.*



Keeping and breeding of cattell, doth yeld no small commoditie and gaires to the husband, so the nourishing, and maintenaunce of Poultry, Foule, Bees, and Fishe (if the countrey be for it) dooth commonly arise to his great aduantage, whereby both the reuenuie is greatly encreased, and the Table dayly with daintie, and no chargeable dishes furnished. Cages, and houses for Birdes, wherein were kept all maner and sortes of Foule, were first deuised by *M. Lelius Strabo* at *Brundisium*, from which time it was first put in vse, to peinne vp such creatures, as naturally were accustomed to flee at their libertie in the ayre. At which time also began to be brought in strange and outlandish Foules, the keeping and breeding wherof, yeeldeth to the husband both pleasure, and profite. We haue here brought in *PVLLARIVS, CHENOBOSCVS, MELISSEVS*, and *PISSINARIVS*, euery one of them severally entreating of such thinges, as belongeth to his charge.

PVLLA.

MELISSEVS. I see you haue here (*PVLLARIVS*) great store of Foule, and Poultrye, and I beleue verily, the profite and commoditie of them, will not quite halfe the charges they put you to.

PVLLARIVS. Des verily they quite your cost, whether you sell them, or keepe them for the Kitchin. It is sayde, that *Anidius Lurco* made yerely of his Poultrye and Foule five hundred pound.

MELISEVS. But I doo a greate deale better the like common Poultrye, that we keepe about our houses.

PVLLARIVS. We haue also of the same here at home with vs.

MELISEVS.

The fourth Booke

MELISSEVS. Then let me vnderstand (I pray) in what order you keepe them, for herein you seeme to be most skilfull.

PVLLARIVS. It is meete that euery one be skilfull in that trade that he professeth. If you wil I will not refuse to shew you that little cunning that I haue: so you on the other side vouchsafe to shewe me the ordynng of your Bees.

MELISSEVS. I will not sticke with you for that, to tell you the best that I can.

PVLLARIVS. Well then with a good will I declare vnto you my knowledge, beginning first with those kindes that are most in vse: for amongst all other houtholde Houltrey, the cheefe place is due to the Cocke and the Henne, that are beside so common, as the poorest wyddowe in the countrey is able to keepe them. In this Byrd there are three poyntes of naturall affection cheefely to be woondred at. The first, the greate carefulnesse that they haue during the tyme of their sitting, wherein for the desire of hatchyng their young, they seeme to be carelesse of either Meate or Drinke. Secondly, that they beare suche loue to them, as they sticke not to hazard their owne liues in the defence of them. And thirddie, that in the Scorne, greate colde, or sicknesse, they preserve and nourish them vnder their Winges, not making for the whyle any account of their owne selues. There is heretofore a most sweete comparisson in the Gospell, wherein our Sauour (*CHRIST*) compareth him selfe to the Henne that gathereth her Chickens vnder her winges. And therefore, since these are common for euery man to haue, and that they alwayes feede about the house, I thinke it beste to beginne with them, and to tell you whiche are best to bee liked, whiche to bee brought vp, and whiche to be fatted. First, the best to be brought for broode, are the dunne, the redde, the yellowe, and the blacke, the white are not to be medled with, because they are commonly tender, and prosper not, neither are they besides fruitfull, and are alwayes the fayrest marke in a Hawke, or a Bussardes eye. Let therefore your Henne bee of a good colour, hauyng a large body and brest, a greate head, with a straight redde and duble combe, white eares and great, her tallons euen. The best kinde (as *Columella* sayth) are suche as haue five clawes, so that they

The choise of
Hennes for
broode.

they be free from spurres: for such as weare those Cockish weapons, are not good for broode, and disdayne the companie of the Cocke, and lay but sceldome, and when they sitte, with their vnruely spurres they breake their Egges. The little Pullets, or Hennes, though the olde age, both for their vnfruitfulnesse, and other causes disalowed them, yet in many places they proue to be good, and lay many Egges. In England at this day, they are vsed as a daintie dishe at mens tables. In the choyse of your Cockes, you must prouide suche as will treade lustily, of colours, as I tolde you for the Hennes, and the like number of tal-
lons, and like in many other pointes, but of stature they must be hyper, carryng their heads straight vp, their Commies must be ruddy and hype, and hanging, nor falling downe, their eyes blacke and sharpe, their Billes short and crooked, their eares greate and white, their wattells orpent, hauing vnder them as it were a kind of grayish beard, the Necke feathers of colour di-
uers, either a pale, golden, or a glystering greene, whiche muste hang rustling from his Necke, to his Shoulders, theyr Breastes must be large, and well brawned, their Winges well feathered and large, their Tayles doubled and flagging, their rumpes and thyres full of feathers, their legges strong, wel armed with sharp and deadly Spurres: Their disposition (for you shal not neede to haue them greate fighters) would be gentle, quicke, and liuely, and specially good wakers, and crowsers: for it is a Byrde that well aporcioneth both the night and the day, and (as *Prudentius* witnesseth) exhorteth to repentance. Neither must you on the other side, haue hym a Cradon, for he must sometyme stand in the defence of his wife and his children, and haue stomake to kill, or beate away a Snake, or any suche hurtfull vermine: but if he be to quarrellous, you shall haue no rule with hym, for fight-
tyng and beatyng his fellowes, not suffering them to treade, though hee haue more then his handes full hym selfe. This mis-
chiefe you may easely preuent, with shackling hym with a shoe sole: for although suche lustie fighters are bredde vp and cheri-
shed for the game, yet are they not to serue the Husbonds turne at home. A Cocke framed and proportioned after this sort, shall haue fiue or sixe Hennes goyng with hym.

The Choyse
of Dogges.

The fourth Booke

MEL I. I pray you let mee vnderstand what time of the yeere is best for bringing forth of Chickins :

PVLL A. In some places, specially the hottest countreys, the Hennes beginne to lay in January, in colder countreys, eyther in february, or at the latter ende of January : you must also further their laying, by geuyng them meates for the purpose, as Barly halfe sodde, whiche maketh both the Egges the fayer, and causeth them to lay the oftner. Some thinke it good to mingle therewith the leaues or the seedes of *Cytisus*, whiche both are thought to bee greatly of force in making them fruitefull. If this be not to be had, you may supplie the want with *Sperry*, or (as *Cardanus* sayth) with Hempseede, whiche will cause them to lay all the Winter. When they lay, you must see that their Nestes bee verie cleane, and kept still with freshe cleane strawe : for otherwise they will bee full of flease, and other vermine, whiche will not suffer the Henne to be quiet, whereby the Egges doo not hatch euen togeather, or many tymes ware able and rotten. The Egges that you sette vnder them, must bee newe layd, howbeit, so they bee not about tenne dayes olde, it maketh no greate matter : if you looke not to them, they will straightwayes sitte after their first laying, which you must not suffer, for the young Bullets, are better for laying, then sitting: the desire of sitting is restrained, by thrusting a feather through their nose. The old Hennes must rather be suffered to sitte, then the younger, because of their experience. Herein must you haue a speciall regarde to knowe whiche be best to sitte, for some bee better to byng vp Chickins, then to sitte. Others agayne wyl cyther breake, or eate vp both their owne Egges, and their fellowes Egges : suche you muste put aside, and if their Nayles and Billes bee sharpe, rather employe them in broodyng, then in sitting. *Democritus* telleth, that Chickins may bee brought forth without setting vnder the Henne, yf so bee the downg of Hennes, syfted very fine, bee put in little Bagges, basted about with soft feathers, vppon whiche the Egges must bee layde strayght vpright, with the sharpe ende vwarde : vppon these agayne must the like quantitie of Hennes downg bee layd, so that they bee of euery side closely couered.

This

This done, you must suffer them to lye for the two or three first e
 dayes, and after, euerie day turne them, takyng good heed
 that you knocke them not one against the other in the turnyng.
 After twentie dayes, you shall finde the Egges broken: and
 therefore the twentieth day, plucking away the shelles, and ta-
 king out the Chickin, you may commit them to the Henne. It
 is written, that Chickins haue been hatched by the continuall
 warmth of a Womans bosome: beside, it hath been seene, that
 Egges being layde in an Ouen, or warme place, couered well
 with Strawe and Chaffe, hauing a little fire beside, and one to
 turne them continually, haue disclosed and broken at their ac-
 customed tyme. *Aristotle* writeth, that Egges put in warme
 shelles, or couered with dung, will hatch of them selues. The
 number of the Egg is that your Henne shall sitte bypon, some
 would haue to be oddes, and not alwayes alike, but in Ianuarie
 and Februarye nineteene, and no more, in Marche nieneteene, and
 ny lesse: whiche number you shall continue all the Sommer, till
 September, or October, after whiche time it is to no purpose to
 breede any longer: for the Chickins, by reason of the colde wea-
 ther and diseases, neuer prosper. Vea some bee of opinion, that
 after the tenth, or twelfth of June, you shall neuer haue fayre
 broode, and that the beste season for sittynge, beginneth at the
 tenth of Marche. And herein you must alwayes be sure to haue
 the Hooone encreaseyng, from that she be tenne dayes olde, tyll
 fyfteeue: for that is the best tyme to sitte in. And so must you a-
 gayne dispose the tyme, as the hatching may fall out in the en-
 crease of the Hooone: for the iust tyme of hatching, there are sun-
 dry opinions. *Aristotle* writeth, that they are hatched in niene-
 teene daies, *Varro* (for Chickins) one and twentie dayes, or
 twentie dayes, for Peacocks and Geese, seuen and twentie
 dayes, and sometymes more: Ducks: in the like space to the
 Henne, specially if they sitte night and day, allowing them one-
 ly the mornynge, and the euening to feede: whiche tymes they
 must of necessitie haue. If so be you will set vnder your Henne
 Peacocks Egges with her owne, you must set her vppon the
 Peacocks Egges, tenne daies before she haue her owne egges,
 wherby they shall bee hatched all at once, neyther must you set
 aboute

The fourth Booke

To haue
Cockchic-
kins, or Hen
Chickins.

Against hurt
of thunder.

aboute five Peacocks or Goose Egges vnder a Henne. If you would haue all Cocke Chickins, you must choose suche Egges as be longest and sharpest, as againe (for Hennes) the roundest, (as both *Plinie* and *Columella* wyte) though *Aristotle* seeme not of that opinion. To vnderstand which be good egges, which not, you must (as *Varro* teacheth) put them in water, and suche as be nought, will swim aloft, and the good, goe straight to the bottome. Others doe hold them vp against a Candle, and if they see through them, they iudge them light and nought. You must in no wise shake them, or shogge them, lest you breake the stringes of lyfe, that are but newly begonne: it hath beene seene, that by shaking of the Egges, the Chickins haue beene hatched lame. We may beside perceiue whether the Egges will proue well or no, if foure daies after the Henne hath sitten, you holde them vp in the sunne, or other light, and if you see that they bee cleere, caste them away, and put other in their places. Against thunder, that many tymes marreth the Egges, some doe sette about them the Leaues or Branches of Bayes, or Ventes, or Grasse, others (againe) the heaues of Garlike, and nayles of Iron. In the greate heate of the Sommer, you must nowr and then sprinkle the Egges a little with Water, and wette them, least by the extreame heate they waxe drye and able, specially the Egges of Turkies and Hennes. When so euer you meane to make cleane their nestes, you must take vp the Egges, and laye them tenderly in some little Basket, and so lay them speedily againe in the cleane nest, neare to the place where the Henne sittes: you must sette Water, and meate, that they may better keepe their Nestes, and that by their long absence the Egges waxe not colde. And althoughe the Henne dooth alwayes turne her Egges, yet it behoueth you when shee is from the Nest to turne them softly with your Handes, that by receauyng a like warmth, they may the sooner bee redie. And if shee haue happened to bruste any of them with her Feete, you must presently remoue them. At the nine tenth daye, you must looke diligently whether the Chickins doo iobbe the shell with their bylles, and hearken whether they peepe: for many tymes by reason of the hardnesse of the shell they can not come forth, and therefore you must

muste helpe them out with your handes, and put them to the
 Henne, and this you muste doo no longer then three dayes: for
 the egges that after one and twentie dayes make no noyse, haue
 nothing in them, and therefore you must cast them awaie, that
 the Henne loose not her labour. Upon the twentieth day, if you
 sturre the egges, you shall heare the Chickin, from that time be-
 ginne the feathers, the Chickin lying so, as the Head reaseth
 vpon the right Foote, and the right wing lieth vpon the head,
 the polke vanishing by little and little away: You must not take
 the Chickins away as thei be hatcht, but suffer them to remaine
 one whole eate with the Henne in the Nest without Feate or
 drinke, till suche time as they bee all hatcht. It is woonderfull,
 and yet the experience seene, that before they be suffered to eate
 they take no harme, though they fall from a great height. The
 next day, when all the flocke is come forth, *Columella* woulde
 haue you to put them vnder a Siue, and to perfume them with
 the smoke of *Beniriall*, or to hang them in a basket in the smoke,
 which preserueth them (as it is thought) from the *Spippe*, which
 many times destroyeth the poore Chickin: then must you put
 them into a Coope with the Henne, and feede them at the firste
 with Barly Meale, sodden in water, and sprinkled with a lit-
 tle Wine. Afterwardes, when they goe abroade, you must seele
 euerie one of them, whether there remaine any of the meate
 they receaued the daie before: for if their Cropes be not emp-
 ty, it betokeneth want of digestion, and therefore you must keepe
 them fasting till all be digested. You must not suffer them to goe
 farre from the Henne, but to keepe them about the Coope, and
 to feede them till thei were strong with husled Barly, and Bar-
 ly Meale: you must also take good heede, that they be not brea-
 ched vpon by either Toade, Snake, or Euet, for the ayre of such
 is so pestilent, as it by and by destroyeth them all: which mischiefe
 is auoyded by burning of *Harts horne*, *Galbanum*, or *Wormans*
 heare, the smoke of al which preuenteth this pestilence. You must
 see beside that they lye warme: for they neither can suffer colde,
 nor to much heate, the feathers about their tayles must be pulled
 awaie, least with the hardning of their dung, their passages be
 stopped, whiche if it be, you must open sosome with a little quill
 you

The fourth Booke

Against the
Pippe.

you must keepe them with the Henne for a monethes space, and after suffer them to goe at libertie. Both the olde and the young, are of all other diseales mosse troubled with the Pippe, specially about Haruest time, whiche is a little white skinne, couering the tippe of their tongue, whiche is to be plucked away with the Nayles, and the place to bee poudered with Ashes, or Garlike poudered and sprinkled vpon it. From this plague you shall preserue them, by feeding them in cleane vessels, and geuing them alwaies the purest and cleaneest water, and keeping their houses alwayes cleane and smoked, or by smoking them as they fitte, with the smoke cheefely of Bayes and Sauyn. The wines of the countrey do commonly cure them, by thrusting a feather through their nose, and stirring it euery day: their diet must bee Heartgrace wrapt in Butter or Garlike, mingled with Beate of Water, or Cloues of Garlike wette in warme Sallet Oyle, and put into their mouthes. Some (sayth *Columella*) doo vse to washe their Mouthes with yisse, and keepe their Billes so long close, as the salt and bitter taste force them to cast at their Nose the spring of the Disease. Others agayne doo cut Garlike in gobbettes, and putting them in skalding Oyle, after it is colde, doo washe their Mouthes. If they happen to eat Lupines, they will straight swell vnder the eyes, whiche if you doo not gently open, and take out the Coze, it presently killeth them. And if so bee the Pippe haue nowe closed vp the eyes, and that they forsake their meate, you must lanch their Cheekes with a sharpe knife, and thrust out the water that lyeth vnder the eyes, and put in the wound salte finely beaten: this happeneth cheefe-ly when in the Sommer time they drinke foule water, and also when they want meate, or take colde. If they eyes bee sore, you may heale them with the iuyce of Purcelane, and Womans milke, annoynting on the out side, or with Cummin, Honny, and salt Armoniacke. You shall ridde them of Lyle, with parched Cummin, and Stauesacre, a like quantite of eache beaten together, and powred on with Wine: also the water wherein wyld Lupines haue been sodden. If your Henne fall to eatyng of her egges, taking out the white, you must powre in Plaster, of some liquid ching, that may come to a hardnesse in the shell.

To

To keepe them from eatyng of Grapes ; you shall giue them the betrie of the wood called the wilde Vine, gathered from the Hedge before it bee ripe, and sodden with Wheate floure, the swill taste whereof will cause them to lothe Grapes. *Plinie* affirmeth; that if you giue the flowers of the Vine with their meate, they will not touche the Grape. As in all other cattell of the Countrey, so in these kindes the beste are to bee kepte, and the worst either to bee solde, or to bee killed in the house. And therefore euery yere aboute the fall of the leafe, when they cease to breede, you shall lessen their number, and putte awaie the old ones. Suche as are aboute thre yers, and suche as are either vnfirmitie, or not good byngers vp of Chickens, but specially those that eat vp either their owne Egges, or their fellows, or suche as after the Cockish maner either crowe, or treade on the whiche number you shall also adde, suche as were hatched after the tenth of Iune, whiche neuer proue to bee faire, but the Cocke as long as he is able to create you maie keepe: For you shall seldom meete with a good Cocke. For fattying, the beste those that haue the skynnes of their neckes thicke and fat. The place where you meane to fatten them, must be very warme, and of little light; because as bothe *Varro*, and our owne experience sheweth, the light, and their often sturrying, keepeth them from beynge fatte: thus must they bee kepte for fve and twentie daies, wherein they will bee fatte. Let them hang euery one in his Bal ket or Cage by hymself, whiche muste haue in it two holes, one to thrust out his necke at, the other to caste out his dung, that he maie discharge hymself, and let them be strawed either with strawe, or course hepe: for the harder they lye, the sooner they fatte. Pull awaie beloes their feathers from their hedes, their winges, and their tales, the one for auoyding of Lice the other for blynding their bodies. Their meate that you giue them, must bee Barly meale; whiche mingled with water, bee made in little pelletes, where with they will bee fatte (as some thinke) in foureteene daies: but see that you giue it them but moderately at the first, till they well digest it, after giue it them in quantitie, accordyng as they digest it: and in any wise giue them no newe, till you perceiue, by feelyng of their cropes,

Choyse of
Poultrie.

Fattying of
Pulme.

The fourth Booke

Makyng of
Capons

Of Egges.

that the olde bee ende wed. Others dooe sprinckle their Heale with Honie sodden in Water, puttynge to thre partes of Water, one of Honie, and one of Wine, and wettyng herein Twa-ten breade, thei therewithall dooe cramme them. Others saie, that if you putte hereinto a litle Hilke, thei will bee wonderfull fatte. The Cockrelles are gelded (as *Aristotle* saith) in the hinder parte, whiche when thei treade, falleth out: this part, if you burne twoo or thre tymes, thei will bee Capons. And if thei bee right Capons, their Coames becommeth pale, neither crowyng, nor treadyng any more. Our wiues of the countrie, cuttyng them betwixt the legges, take out their stones, and sowyng vp the wounde, annoint it with Butter, whiche doen thei shutte thein vp in a Coope, not sufferyng them to drinke in a daie or twoo. From the begynnyng of Harvest, and all Winter long, the offall of the Corne, and the Barnes dooze doeth feede them sufficiently: where thei plant Vines, sparing others more costly foodes, thei feede them with the kernelles of the Grapes: and where there is neither the offall of Corne, nor Graped, thei muste bee feede with Dates, Sperie, or such like. To cause them to laie in Winter, you muste giue them (as I tolde you) Hempseede. If you would haue greate Egges, *Lebennus* teacheth to beate in powder Bricke, or Flaunders Tile, and minglyng it with Chesse and Wine, to make it in Dow, and giue it to your Henne, or to putte a Saucerfull of the powder of the Bricke, to a Gallon of Braime, and to feede them with it. The Egges of Pigeons, Geese, Peacocks, and Turkeys, bee all white, the Egges of water Foules bee grenish, and pale, the Ginnie Hennes Egges, bee like the Pehennes in all chynge, sayng that thei be speckled as the Turkie Hennes. The Phe-
santes, and the Kastrils Egges, are reddish. The Egges of al Foules (as *Plinie* saith) are of twoo colours, wherof the wa-
ter foules Egges, haue a great deale more yolke then white
and that more blacke then others. The Egges of Fishes, are al
of one colour, haue no white in them. The Egges of Birdes
are by reason of their heate, brittle: and Serpentes Egges, by
reaso of their coldnesse, tough. Fishes, by meanes of their moi-
sture, softe in layng, the rounde parte of the Egge cometh
first

first out, the shell being soft, & presently after hard: what forme soeuer thei haue, the long are moste commended, as witnesseth the Poet. The Egge in fashion framed long, and of them (as I saied before) is brought forth the Cocke Chickin, as of the rounde ones the Henne, though *Aristotle* be against it. Some Hennes dooe laie verie greate Egges, and those moste tymes with twoo yolkes, haupng the Shell deuided as it were with a circle, whiche bothe *Aristotle* writeth, and our experience approueth. Some bothe laie double, and hatch double: some are so fruitfull, as thei laie greate numbers of ones, some euery daie, some twice a daie: some are so fruitfull, as thei kill them selues with layng. In the middest of all Egges, there lieth as it were a drop of blood, whiche is supposed to be the harte of the Birde, whiche is the firste in all the bodie framed: The bodie it self is wrought of the white. The sustenance is the yolke, the hed while it is in the shell, is bigger then all the bodie, the eyes shutte by more then the hed. While the chickin increaseth, the white goth to the middest, and the yolke compasseth round about. The 20. daie (as I saied before) if you stirre the Egge, you shall heare the Chickin, from whiche tyme the feathers come forth, lying so, as the head resteth vpon the right foote, and the right wyng couereth the heade. The adell Egges are thought to come of the haine luste and treading of the Hennes together: some suppose the to be bred of the winde, and therefore call them winde egges as *Aristotle* before *Plinie* hath written. Egges are preserved in Winter, if you keepe them in Chaffe, strawe, or Leuen, and in Sommer, if you couer them with Bran, or wheate. Some doe couer them before in fine beaten salt for the space of sixe houres, and after washe them and so laie them in chaffe, straw, or bran. Others again couer them in Beanes, and some in Beane flore, and some in heapes of Salte: but Salte, as it suffereth not the Egges to corrupte, so it greatly diminisheth the substance of them. Your Hennehouse must bee made in that parte of your house, as lieth in the Winter towarde the rising of the Sunne, and ioyning as nere as maie be to some Kille, Duen, or Chimney, or to the Kitchin, so as the smoke maie come amongstest the: for smoke is verie hole some for this kinde of foule. And that

The fourth Booke

was (I thinke) the cause that the old people made choise in their quintrentes of smoke Hennes, as of the beste, as it appeareth by olde Rentalles. Lette the front of your Henne house stande alwaies towardes the East, and to that coast let the doore open. Let the inner roomes bee well furnished with Loftes and Ladders, and small windowes openyng Eastward, at which your Poultrie maie flee out in the mornynge, and come into the roost at night. Looke that you make them close at night, and let the windowes bee well lettised for feare of Uernine. Let your nestes and lodgynges, bothe for layng and broodyng, bee orderly caste, and agalust euery neste and roostyng place, place steppes and boordes to come vp by, making them as rough as maie be, that the Hennes maie take good hold when thei flee vp to them, and not by their ouer smoothenesse, bee forced to flutter and hurte their Egges. It shall not bee amisse, if you pargette the house bothe within and without with good Plaster, whereby neither Weesell, nor other hurtfull Uernine maie enter in. Boorded floore are not for foule to rooste vpon, whiche almoste all kinde of Birdes refuse, because of the hurte that thei receiue by their dounge, whiche if it cleaue to their feete, breedeth the Goute. And therefore to roost vpon, you must make them perches, which *Columella* would, should be made sower square: but it is better to haue them rounde, so that thei be not too smoothe for them to take holde by. Let the perches reache from one side of the wall to the other, so as thei stande from the floore a foote in height, and twoo foote in distaunce one from the other: and thus haue you the fashion of your Henne house. The Courte where thei goe, must bee cleane from dounge and durtinesse, not haupng water in it, saupng in one place, and that must be verte faire and cleane: for if it bee pudled, or durtie, it breedeth (as I saied before) the Pippe. To keepe their water cleane, you maie haue faire earthen, or stone vessel, or troughes of Wood, couered in the toppe, in the whiche there muste bee seuerall holes so bigge, as the hed of the foule maie easely enter: for if you should not keepe them thus couered, the Poultrie would in their drynkyng defile and poison it with their dounge. Their meate muste be giuen the betymes in the mornynge for strayng abroade, and

a little before night, that thei maie come the tymelier to their rest. Those that bee in the Coope, must (as *Columella* saith) be fedde thise in the daie: the others must be vsed to an acquainted voyce, that thei maie come at the calling. The number must bee well marked: for thei sone deceiue their keeper. Beside, you muste haue rounde aboute by the walles, good plentie of duste, wherein thei maie bathe and proine them selues: for as the Swine delighteth to wallowe in durte, so dobeth this kinde to bathe and tumble in the duste. And this is (I thinke) almoste all that is to be saied of Pulletin.

MELISSEVS. Yea, but we must heare somethyng also touchyng the other sortes of Foule, that are kepte aboute the house, whiche peraduenture *CHENOBOSCVS* can instructe vs of.

CHENOBOSCVS. And if you wil needes haue me, I wil not refuse to shewe you sonewhat also of my feathred cattel.

MELISSEVS. I praie you doe so.

CHENOBOSCVS. Amongest the Foule that wee keepe about our houses in the countrey, the second place of right, is due to the Goose and the Durke, whiche are of the number of those that thei call *Amphibia*, because thei liue as well vpon the Lande, as the water. And because the keepyng of Geese requyres no greate labour, it is a thyng not vnnecesse for the husbandman, for that (if he haue place commodious for it) it is doen without any charges, and yeldeth good aduantage bothe with their broode, and feathers, for beside the profite of their Egges, you maie rwise in the yere, at the Sperryng, and the Fall of the lease pull them. Moreover, thei are a verie good dishe for the table, yea, beyng moze watchfull then the Dogges, thei giue warning when they sleepe. And therefore they were with the Romans had in greate honour, because thei with their gagglyng bewaied the enemie, that other wise in the night tyme had takē the Toun: *Plinie* writeth of a Goose, that would neuer bee frō the philosopher *Lacydes*. Your choise must be of those that bee of the fairest kinde: *Varro* liketh beste the white ones, whiche colour was moste esteemed in the old tyme, as appareth by the presentes that were giuen the same *Varro* accouteth the graie

OF Geese.

The fourth Booke

for a wyde kinde. They are kept in Marshes, Fennes, Lakes, and Marshes commons: for to Corne ground, Dedowes, and Pastures, it is a verie hurtfull Foile: shee biteth whatsoeuer young spring she may reach, and what she once hath bitten, doth neuer lightly prosper againe. Besides, she stencheth the ground with her unprofitable, or rather most hurtfull dounging: wherefore (as I sayde) it is best to keepe them in Fennes, Lakes, and Marshes. If you haue store of suche ground, you shall doo well to keepe them: for you can not well keepe them without good store of water and pasture. The Goose delighteth in such meate as is naturally moyst and colde, and shunneth naturally suche thinges as are hurtfull for her, as the leafe of the Bay, and (as *Alianus* wytteth) the *Oleander*: the best and meetest tyme for them to bryede in, is from the Kalends of Marche, to the tenth of Iune. They tread most commonly in the water, whyle they swynne in the Ryuers, or Fishponds. *Columella* would haue you keepe for euerie Gander, three Geese, thinking by reason of theyr vntwelynesse, this number to suffice: within your courte, you must make them for theyr better safety, seuerall, and secrete penes, in sundrie partes thereof, where they may sitte and bryede. Some would haue the Goose roome framed in suche order, as euerie Goose may haue her place to her selfe: whiche, if any man thinke too troublesome, hee may make on sufficient wide roome to serue them all. The places where they shall lay, must be dry, and well strawed with strawe, or suche soft matter, and well defended from vermine. The Goose must not be suffered to lay out of her nest, but when you shall perceauie they seeke it, you must grope them, and if they be with Egge, whiche you shall easely feele, but shut them vp in their nestes, whiche you shall not neede to doo aboue once, or twyse: for where shee hath once layde, she will alwayes of her selfe seeke to be. They wyll lay (as some hold opinion) thysle in the yeere, if they be not suffered to sitte, as it is best you doo not: for their Egges are better to bee hatched vnder a Henne, then of them selues, and wyll better a great deale prosper. The Egges of Geese, & Swans, were vled (as *Alianus* witneseth) as a most dayntie dyshe at bankettes, among the Kinges and Princes of the Indies.

Aristotle

Aristotle affirmeth, that the Goose alwayes beth to sitte, and neuer the Gander, contrary to the order of many other Foules, continuing alwayes till shee haue hatched. After the last lay-
 yng, you shall suffer them to sitte, and marke euery ones Egges
 with a seuerall marke, that they may be sette vnder theyr owne
 Goose, for it is thought they will neuer hatche a strangers Eg-
 ges, without shee haue her owne vnder her. Of Goose Egges,
 as of Pheasants Egges, you shall (as I sayd before) neuer sette
 vnder a Henne aboue siue, nor vnder three: but vnder the Goose
 you shall set at the least seuen, and at the most siueene. You must
 keepe to lay vnder your Egges, the rootes of Nettles, whiche
 they saue, preferueth them against the stinging of Nettles,
 whiche other wise many tymes killeth the Gosling, if they sting
 them. The Egges will not bee hatched if the weather bee cold,
 before the thirtieth day, if it bee warme, in lesser time: howbe-
 it for the most part, the Gosling is hatched the thirtieth day af-
 ter the sitting. Some doe vse to set by the nestes, Barly steeped
 in water, or Halse, whereby the Goose shall not be forced to be
 any whyle absent from her Egges. When your Goslinges are
 come forth, you shall for the first tennedayes feede them with
 the Goose in the nest. Afterwardes, when the weather is faire,
 you may suffer them to goe abroad, taking good heed that they
 be not stinged with Nettles, nor that you let them goe a hun-
 gerd into the Pastures: but to geue them afoze they goe abroad
 the leaues of Endiue, or Lettuse chopt, to assuage their hun-
 ger: for if you put them a hungerd into the foode, they strale
 and breake their owne neckes, with pulling at the tough and
 stubburne weedes, by reason of the sudden starting backe againe
 of the weede. The Goslinges of diuers broodes must not goe to-
 geather, nor be shutte vp togeather, for hurtynge one another.
 When they be foure monethes olde, or some what before, is the
 best tyme for fattynge them: the young ones are soonest, and eas-
 seliest fatted. If you geue them ground Halse, and wheate floure,
 you neede to geue them nothyng, so you let them haue drinke
 penough, and keepe them from going abroad. The Greekes did
 vse to put to two partes of ground Halse, foure partes of Bran,
 tempyng it with water, letting them drinke thys away, and at

Fattynge of
 Geese.

The fourth Booke

Night. If you would haue their Livers soft and tender, you
 shall mingle drie Figges well beaten with water, and making
 pelletes thereof, cram them with it for the space of seuentene,
 or twentie daies. The Jewes at this daie, being the skilfullest
 feeders that be, doe vse a straunge order in the fattynge of them,
 wrappynge the Goose in a Linnen Aprone, thei hang her vp in a
 darcke place, stoppynge her eares with Beason, or some other
 thing, that by neither hearynge, nor seeing of any thing, shee be
 not forced to stroggele, nor crie: after, they geue her pellets of
 ground Malt, or Barly steeped in water thysle a day, settynge
 by them Water and Grauell, by whiche manner of feeding, they
 make them so fatte, as the Luer many tymes cometh to bee
 fye pounde in weyght. Whylest I was at the Councell of
 Wormes, there was a Luer of a Goose brought me by a Jewe,
 that wayed foure pound. Plinie is also a witnesse, of the great-
 nesse of the Luers of fatte Geese, affirmynge, that they wyll
 growe after they bee out of the bodies, being sprinkled with
 milke. The common order of fattynge with our countrey people,
 is to shutte them vp in a darcke, and a narrowe place, and to set
 before them Barly, or Beech wheate, geuing them water with
 a little Sand, or Grauell in their Troughes: and with this or-
 der they haue them fatte in fourteene dayes. After haruest, they
 will be fatte with the Grotten, or Stubble. They are plucked
 (as I sayd before) twyse in the yere, in the spring, and in the
 fall of the leafe. Some vse to clippe them, but then they fea-
 thers neuer growe so well: but if you pull them, you shall haue
 them to come verie sayre agayne: and this is pynough for a
 Goose. Duckes and Teales, are to bee ordered in like maner
 almost as the Goose, sauing that they delight more in Waters,
 and Marshes: and therefore you muste force some Waters,
 Lakes, or Pooles, for them, whereunto they may easily goe
 and swymme, and dyue at their pleasure. Columella would haue
 you haue a Court for the noyse for them, where no cattell vse,
 and neare to the house, round about the whiche you shall buyld
 for them little handsome roomes, thye foote square, with
 pretty doores to euery one of them: whiche when they breede,
 you shall keepe shutte. Ward by, you must haue eyther some
 Pond,

Duckes.

Pond, or Riuer, wherein (as I sayd) they may swim: for without the helpe of the water they can as euill liue, as without the land. It is good also to haue neare vnto them, some good pasture, or meddowe, or to set about the Ponds or Riuers, suche herbes as they best like, as Clauer, Fenegrecke, Endiue, Lettise, and such other as they most delight in, and wherewith they young doo well feede: beside, you must geue them Otes, Barly, and other coine in Water. There is nothynge that they more loue then Acornes, nor that better satteth them. They delight wonderfully to be amongst Reedes and Sedges, wherein they may lye safe from rauenous Byrdes, but so, as there grow no great stalked weedes, that may hinder their swimming: for they delight greatly to playe them selues in the water, and to strue who can swim fastest, when the wheather is fayre and warme: for as they loue suche places where they may best pray vpon the creatures of the water, so are they much offended, if they be restrayned of their libertie in swimming. In Winter, when the waters be frozen, you must ply them sometimes with meate. They delight to make their nestes in some secreete Couert, but therein you must preuent them, and make their Nestes in their owne lodging, or abroad, well couered and closed with weedes: to which nest you must haue some litle sluice, or gutter, by which you may euerie day poure in Water and Heate. Their foode must be (as I sayd) Otes, Barly, Pease, Panicle, Millet, and Sperry, if you haue any store. They lay great store of Egges, wherewith as with Goose Egges, you may well feede your familie. The Egges of Dugges and Geese, are kept in like sort as I told you of Hennes Egges: and beside in Bran, Wheate or Ashes. They breede in the same season that Geese and other Foule doo, about March and Aprill. And therefore where you keepe them, you must strawe sticke and strawes for them to make their nestes withall. Their Egges must be suffered to bee hatched by them selues, or els remoued & set vnder some Henne: for the Ducklinges that the Henne hatcheth, are thought to bee gentler and tamer. You must take good heede, that the Egges whiche they laye, bee not eaten and spoyled by Crows and Pyes, while the damme is seeking abroad for meate. If so bee
you

The fourth Booke

you haue Riuer, and Lakes for the purpose. It is best to let the dammes byng them vp, for when they be hatched, they will liue very well vpon the water with theyr Dammes, without any charge at all: onely takynge good heede, that they be defended from Buzardes, Kites, Crowes, and other like vermine: but so you vse them, as they will euery night come home to the house, for it is not good to let them be abroad in the night, for danger of losynge of them, and making them wilde. Yet hath it been seen, that suche as haue hatched abroad, haue after wardes come home, and brought with them a greate number at theyr tayles. When I was Embassador in England, it was told me by men of good credite, that there was in Scotland neare to the Sea, certayne Trees, that peerelely brought forth a fruite, that falling into the Sea, became a kinde of wyld Ducks, or rather Barnacles, which though it seemed strange vnto me, yet found I Aristotle a witnesse of the like, who wytteth, that the River Hypanus in Scythia, bringeth forth trees, whose leaues beynge somewhat larger then Maple leaues, whereof commeth a kinde of foure footed Birdes. But nowe to Peacocks, whiche Birdes being more for pleasure then profite, are meeter to bee kept of noble men, then of poore Husbandes of the Countrey, though Varro wytteth, that *M. Aufidius Lurco*, who first began the fattynge of this Foule, made peerelely of his Peacocks foure hundred pound, whose example numbers following, the pryce of Peacockes grewe to be great, so muche, as theyr Egges were solde for halfe a crowne a peece, the Peacockes themselves, at foure Nobles a peece. The fleshe is verie good and delicate, meete for noble mens Tables, and wyll be long kept without corruptynge, the Egges also bee verie pleasaunt, and good to be eaten. *Hortensius* they saye, was the first that euer killed Peacocke for the Table in Rome, as a newe dyshe at the Priestes feast. To this Byrd, is ascribed both vnderstandynge and glory: for heynge praysed, hee setteth vp strayght his tayle, and (as *Plinie* eloquently discrybes it) cheefely agaynst the Sunne, whereby the beautie may more bee seene. His tayle fallynge euery peere with the fall of the leafe, hee mourneth, and creepeth in corners tyll it bee syng agayne. They goe abroad, as

Henrys

Peacocks.

Hennes and Chickins doo, without a keeper, and get their owne liuynges. They bee best kepte in little Ilandes: for they flee neither hye, nor farre of. Some thinke it to bee a spitefull and an enuious Birde, as the Goose to bee shamefast, and that hee deuoureth his owne downe, because he woulde haue no man receyue benefite by hym. Hee liueth (as Aristotle sayth) fife and twentie yeres: hee breedeth at threer yerres olde, the Cocke hauyng his feathers diuers coloured: hee hatcheth in thirtie dayes, as the Goose doth, and layeth threer times a yeere, if his Egges be taken away and set vnder a Henne. You muste looke, that those that you set vnder a Henne, bee newe layd, and that the Henne from the first of the Moone, bee set vppon niene Egges, fife of the Peacocks, and foure of her owne. The tenth day after she hath sitte, take away the Hennes Egges, and put vnder the like number of freshe Hennes Egges. They must be turned, and therefore marked vppon one side. And see that you choose the greatest Hennes: for if the Henne be little, you must take the lesser number of Egges, as threer Peahennes Egges, and sixe Henne Egges. When they bee hatched, you must as you doo with the Henne, let them alone: the first day afterwards bring them out, and put them with the damme into a Pen, and feede them at the firste with Barly floure sprinckled with water, or pappe made of any other corne, and cooled. A fewe dayes after, geue them beside this, chopped Leekes, and Curdes, or freshe Cheese, the Whay well wrong out: for Whay is thought to be very hurtfull for the Chickins. After they be a moneth old, you may let them goe into the feeld and followe the Henne, tyng the Henne with a long line, that she goe not to far abroade, but that the Chickin may come home in tyme. After the sixth moneth, you may geue them Barly, and bread: and after the seuenth moneth, you may put them to roust in the house with the other Peacocks, not suffering them to sit vpon the ground, but vppon Peatches for takyng of colde. And although when they ware greate, they cheefely delight to sitte vppon the toppes of Houses, and bee as the Goose is, whiche are the beste watchmen, and also the beste warnyng geuers in the nyght tyme: yet is it best for you to vse them to sitte vppon Peatches, in Houses

The fourth Booke

les made purposely for them. *Columella* thinkes it not good to suffer sundry Hennes with their Chickens to feede together, because the Henne after she seeth a bigger then her owne, maketh the lesse ascompt of her owne Chickens, and many tymes by that occasion forsaketh them. The Cocke, for the greate lust that he hath of treade, breakes a sunder the Egges that bee vnder the Henne, and therefore it is beste to haue the Hennes to sit as secretly as may bee: they also vse to beate and chase their owne Chickens, tyll they see them cressed vpon the head, taking them tyll then, to bee none of their owne. One Cocke sufficeth for fise Hennes, who by too ofte treading, dooth many tymes cause that the Egges neuer come to good. In warme countreys they begiune to treade in Februarie, when setting vpon his tayle round about hym, taking hym selfe for no small person, hee beginneth to wooc, and therefore at this tyme both the Cocke and the Henne, are to bee cherished with meates for the purpose to encrease their lust, as Beanes tossed a little by the fyre, and geuen them warme euerie fise dayes in the mornynge. The quarellous and troublesome Cockes, must be seuered from their fellowes, for hurting the weaker, and keeping others from treading. The Hennes must be kept so, as they may laye onely in their houses, and euerie day groped for their Egges, and heedely looked to, with soft strawe layd vnder ther Searches: for many tymes they lay as they sitte vpon the Search. The diseases of this Foule, and the remedies, are almost one with the diseases of the house Cocke and the Henne spoken of before, that is the Pisse, and yll digestion. Their greatest danger is, when their Comes come firste out, for then are they payned, as children are in breeding of teeth.

Diseases.

Turkie
Cockes.

MELISSEVS. I would faine learne the right ordyng of their outlandish Birds, called Ginny Cocks, & Turky Cocks.

CHENOBOSCVS. This kind of Poultrie we haue not long had amongst vs: for before the yeere of our Lorde. 1530. they were not seene with vs, nor I helceue knownen to the olde wyters. Some haue supposed them to be a kind of the Birdes called in the olde tymes *Meleagrides*, because of their blewish Coames: but these kindes haue no Coames, but only Wattles.

Others

Others againe reckon them for a kinde of Peacockes, because thei doe in treading tyme alter the same sort, spreade and set up their tailed, bragging and vaunting them selues: howbeit thei neither resemble these in all pointes. But because this kinde of fowle, bothe for their rarenesse, and also the greatnesse of their bodie, is at this daie kept in greate flockes, it shall not be muche amisse to speake of the: for in daintinesse and goodnesse of meat, the Hennes nraie compare with either the Goose, or the Pheasant, and the Cocke farre excell them. The colour of their feathers, is for the moste parte white, blacke, or pied white and blacke, some blew & blacke. Their feete are like vnto the Peacockes, their tailed short, but spread, and borne up after the Peacockes guise, specially when thei treade. The heades and the neckes of them, are naked without feathers, couered with a wrinkled skinne, in maner of a Cowle, or a Hood, whiche hangyng ouer their billes, thei drawe up, or lette fall at their pleasures. The Cocke hath the greater Wattles vnder his Chinne, and on his breaste a tusse of heare. The colour of that wrinkled skinne about his head (whiche hangeth ouer his bill, and about his neck, all swelling as it were with little bladders) he chaungeth from tyme to tyme like the *Chamelion*, to all colours of the Rainbow sometymes white, sometymes red, sometymes blew, sometymes yallowe, whiche colours euer altryng, the birde appeareth as it were a miracle of Nature. The dieting and keepyng of the, is almost all one with the Peacocke, sayng that this birde can worke awaie with cold, and wette. It is a birde wonderfully giuen to breeding, euery Cocke must as the Peacock, haue fower or fife Hennes with hym: thei are more forward in breeding then the Peacocke, begynnyng either the firste yere, or at the farthest at two yere old: thei begin to laye in Marche, or sooner. In hotte countries thei laye greate numbers of Egges, if thei be continually taken from them, and set vnder Hennes, and if so be you take them not awaie, thei begin to sit at the first: for thei be of all others moste giuen to sitting, and so muche, that if you take awaie all their Egges, thei will sitte vpon a stone, or many tymes the bare neste. You must therefore restraine them of this desire, either by thrusting a feather throughe their nose (as

The fourth Booke

I before told you) or by wettyng their bellies with cold water. You must sette vnder their Egges (as I taught you before) in the Peacock: for thei haue bothe one tyme of hatchyng. The keeper must marke the one side of the Egges, and alwaies tourne them, sprinklyng them now and then gently with faire water, and take heede the Cocke come not at them, for he will breake them as well as the Peacocke: for the Cocke of this kinde, is a frowarde and a mischynous Birde. The Chickens beeyng hatched vnder a Henne, maie bee kept with the Hennes Chickens, or els verie well alone with the Henne, growyng faster a great deale then the Peachieke. You shall fede them in like sorte as you dooe the Peacocke, or other Poultrye: for thei will eate any thyng, and delight in Grasse, Weedes, Grauell, and Sande. And because thei can not awaite with colde, nor wette, you must keepe them in Winter, in the warmest and driest places you haue. The Peaches whereon thei vse to sitte, must not be hye, but an eight or tenne foote from the grounde, neither be thei able to flee any greate height, and therefore muste bee holpen with Ladders, or Steppes. The greatest disease that thei are subiect vnto, as the Dippe and the Squecke, whiche must be holpen in like sorte as the Hennes, and the Egges kepte after the same maner. In some places thei vse to make Capons of them when thei be younge, whiche are serued as a daintie dishe to the table, as was muche vled in the house of that goodlie and vertuous *Semproma*, that Ladie Hales of Kent, who was firste the wife of sir Walter Hauntill of Northamptonshire, a woman in whom all vertues and bounties in her life tyme flourished.

Lady Hales a
merrou of
gentlewomen.

MELISSEVS. I well remember that ladie, and haue heard her highly commended of suche as in her life tyme best knewe her, for a number of gracious and goodlie giftes that were in her, as her speciall loue and delight in God, and in his seruice, her helpfull hande and comforte to suche as were poore and distressed, as well in releuyng the with meate and money, as with healing diseases, and curyng a number of lothsome, and almoste incurable vicers and woulbes, her milde and sweete disposition, her greate humilitie, and carelesnesse of the vaine worlde, and other suche vertues. I would to Christe that all o-
ther

ther Gentlewomen, that professe Chyſte outwardlie, were as well giuen to followe hym in deede, as ſhe was unfainedly.

CHENOBOSCVS. She was the verie Phoenix and Parageon of all the Gentlewomen that I euer knewe, neither am I ſure I ſhall euer ſee the like: but ſhe happily reſteth with hym, whom in her life tyme ſhe ſo earneſtly ſerued. If you bee not wearie, I will returne to my Fowle, and ſhewe you the beſt order for keepyng and mainteinyng of Pigeons.

PVLLARIVS. I thinke bothe **MELISSEVS** and **PISSINARIVS** would gladlie heare you tell vs ſomethyng of this, as I my ſelf moſte willyngly alſo would.

CHENOBOSCVS. Though you **PVLLARIVS** are better able to ſpeake hereof then I am, yet becauſe of my profeſſion, I will not reſuſe to take it vpon me. What ſo euer he bee, that giues hymſelf to the trade of Houſebandrie, it beho- ueth ſpecially to haue a care for breedynge of Pigeons, as well for the greate commoditie they yeelde to the Kitchin, as to the profite and perely reuenue that they yeelde (if there bee good ſtore of Corne ſeeldes) in the Parkette. Varro writeth, that in his tyme a paire of Pigeons were ſolde for 1000. HS, And that **Lucius Axius**, a knight of Rome, before the ciuill warres be- twixt **Caſar** and **Pompei**, ſolde his Pigeons at x.li. the paire: ſo muche was that tyme giuen to wantonneſſe and gluttonie, pea- at this daie in our tyme, hath been ſeen giuen for a paire of Pi- geons x.li. Flemiſhe. And therefore the Dovehouſes are com- monly built with greate coſte, and beautie in the toppes of tur- rettes and hauſes, from whence by narrowe grated windowes they flee abroad to their feedynge. Pigeons (if the countrie be for them) are fedde and mainteined with little coſte, feedynge them ſelues all the yere long with ſuche meate as they finde abroad, except at ſuche tyme as the ground is couered with ſnowe, whe- as you muſt of neceſſitie helpe them with a little meate. There is twoo ſortes of them, one wilde kinde, that is brought vp in Dovehouſes, and is of colour either blewish, white, ſpeckled, or dunne: howbeit, the white is not good to be kept, becauſe they be ſoneſt deſtroied with vermin. In Italie, there are of this ſort, as bigge againe as ours, and are now common in Flaunders.

An

Columbe.

Pigeons.

The fourth Booke

An other sort is more familiar and tame, and something more large of bodie, with rough feete, and commonly of colour white and somtyme speckled and yellowishe: this kinde is commonly kept in Cities and Townes, where the others can not be kept, and is fedde with meate at home, and because thei are euer in daunger of vermine, and rauenyng Birdes, thei are still kepte within doores, and alwaies fedde at home. This kinde the common people call tame Pigeons, or month Pigeons, because thei breede euery moneth, saue in the deade of Winter. Bothe these sortes are woonderous fruitefull, breeding commonly eight times a yere (if the kinde bee good) yea sometymes tenne, and a leuen tymes: for in Egypte (as Aristotle telleth) thei breede all the Winter long. And though Pennes are more fruitefull in layyng of Egges, yet Pigeons are more profitable by often byrnyng forth the young: and therefore you must prouide you suche breeders, whose bodies bee greate and faire, not too old, nor too young, of a good and perfecte colour, and a fruitefull kinde. Ye behoueth him that will begin a Douehouse, not to begin with the young and little ones, but with the breeders, and to buy so many Cokes, as he doth Pennes, and to keepe them if he can, matched togeather of one nest: for if thei be so matched, thei will breede a greate deale better. Thei byrnyng forth commonly a Coker and a Penne together (as Aristotle writeth) and our experience sheweth it: In Marche thei beginne to breede, if the weather bee warme, before. There is no birde fruitefuller then the Pigion, for in fourtie daies she becometh laith, hatcheth, and byrnynges vp, and that for the moste part all the yere, excepte (as I saied before) in Winter. She laith two Egges, and when she hath laied the firste, whiche is a Coker, the next she laith, whiche is a Penne, the thirde neuer lightly cometh to good. Bothe the kindes doe alwaies sitte, the Coker in the daie, the Penne in the night, thei hatche in twentie daies, thei lye after five treadinges. In Sommer thei sometymes byrnyng forth in two monethes three paire: for vpon the 19. daie thei hatche, and presently conceiue again. And therefore you shall often find among the young Pigeons, Egges some ready to hatche, and some flyng: if there be no Cokes, the Pennes will treade one the

Tame pigeons or
month pigeons.
breede 8 times
10 times in
one yere.

the other, but their Egges neuer come to good, but are winde Egges: *Aristotle*, and *Theodorus* calleth them water Egges, whereof there neuer commeth any thing, and because the young ones will bzeede at fve monethes olde, we suffer the first flight to flye, to increase the bzeede: as being hatched in Marche, will bzeede againe in July, or August. Those that we meane to take for the Kitchin, or the Parkette, are best to bee drawn at the latter tyme of the yeere, when they are worst able to defende them selues from the colde, and from Buzardes, and Crows: the best for broode among all Fowles, is the Marche broode. They that meane to fatten Pigeons to sell them the dearer, doo seuer them when they be newly feathered, and feede them with chawed white Bread twyse a daye in Winter, and thysle in Sommer: and suche as bee nowe harde pend, they leaue in the Nest, plucking the feathers of their wyng, and breaking their Legges, that they remooue not from their places, geuyng the dammes good plentie of meate, that they may better feede them selues, and their young. Some (as *Gelius* wyrteth) doo softly tye their Legges: for if they should breake them, they thinke the paine would keepe them from fattynge: but this tyeing dooth little good, for whyle they struggle to geate them selues loose, the labour will keepe them from beyng fatte: but their Legges beyng broken, the payne will not remaine aboue twoo dayes, or thre at the vttermoost, and will keepe them that they shall neuer stray from their places. Some vse onely to pinion them, but so fall they many times out, and become a praye to Vermin: and therefore it is good to bring them to the Kitchin, before they bee full ripe. The vnfruitfull and noughtie coloured, and the otherwise faultie, ought cheefely to be fatted, and must be crammed in suche sort as you cramme Capons. Dovehouses, or places for Pigeons to buyld in, are made after diuers manners: for the same Pigeons, and suche as are fedde at home, they make in the highest partes of their Houses lying towarde the South, certayne hollowe roomes, and celles for them, such as *PVLLAR IV* hath described for his Pullen: and if the place doo not so serue, dyuyng in certayne winnes into the Wall, they lay vpon them frames of boords, with particions in them, or earthen

The fourth Booke

pottes to breede in, letting certaine Ledges runne from hole to
 hole, that they may the better come to their Nests, and walke
 vp and downe in the Sunne. But the houses for the other wilder
 kind, because they conteyne greate numbers, are built after a
 more handsome order, although vnder the eues of houses, and in
 steeples of Churches, you shall haue thousands breeding. *Varro*
 appointes the Douehouse to be buyld in this sort: a Towrie ad-
 ioyning to the house, & well lofted and sceled, aboue, with one lit-
 tle doore in it, and foure windowes, aunswering the foure quar-
 ters of the Heauen, which windowes must be well grated, so as
 they may geue light penough, and keepe out Uermine. All the
 walles within must be faire white limed, for with this colour is
 the Pigion woonderfully delighted: besides, it must be well par-
 getted and playstered without, specially about the windowes, so
 as neither House, Weesell, nor other vermine may enter: the
 windowes must bee so placed, as they may let in the Sunne all
 the Winter, haupng a hole of sufficient widenesse ouer against
 them, well netted and tunnelled, in such sort, as the Pignons may
 easely flee out and in at, and yet not suffer any hurtfull bird to en-
 ter: for the Pigion taketh great delight in flying now and then
 abroade, where after shee hath recreated her selfe, she commeth
 with ioy to her nest againe: as on the other side she mourneth, if
 she be restrained of her libertie. Round about the walles within,
 you must haue little round holes, from the toppe to the bottome,
 wherein they may breede: *Varro* would haue them three hand-
 fulles in length, and ledged from hole to hole for them to walke
 bypon. Some thinke it beste to make your Holes of Lome, or
 Lime, and not of Bricke and Stone, as many doo, because of the
 warmth. There be some that buyld their Douehouses vpon pil-
 lers, in the midst of some Pond, or great Water, both because
 they delight in water, and because they will haue them safe from
 vermine. The meate that they most delight in, is Tares, wilde
 Ifriche, Pease, Wheate, Millet: where these bee not, you may
 geue them Spery, specially in winter Rape seede, and Cocks: for
 by gathering and peckpng vp these little seedes, they geat them
 selues a heate in cold weather. When you geue them meate, you
 must throwe it hard by the Walles: for that part is commonly
 cleaneft

Best meate for
 pignons.

cleaneſt from dounge. And though *Varro* biddes you to ſweepe
 and make cleane your Douchhouſes continually, and that the
 dounge is good and profitable for the ſeele, yet ſeeing this kinde
 of Foule doth delight in places ſprinkled with their owne dounge
 you ſhall not neede to bee carefull in cleaſing of it. Looke well
 that they be not frayde, or diſquieted with Gunnes, or noyſe of
 people, or other like, ſpecially when they ſitte: and if you haue oc-
 ſion to goe into the houſe, ſee that you do it about noone tyme,
 when they bee abroad a feeding, and bee ſure to knocke well be-
 fore you come in. Some ſay, that it will cauſe them to loue the
 houſe, and allure others to come thither, if you ſprinkle them
 with *Commyn*, before they goe to feeding, or perfume the houſe
 with *Sage*, and *Frackenſence*. Some haue an other experi-
 ence for this purpoſe, and that is *Dotthardes* beaten ſmall and
 ſearced, mingled with the hearbe *Coaſt*, and good old wine, and
 geuen vnto them. Others take *Barly* floure, ſodden with dye
 figges, and a part of *Hony*. *Cardan* teacheth this, as the beſte
 for this purpoſe, of *Barly*, or *Opellet*, of *Comyn*, of *Coaſt*, of
Agnus Caſtus, of *Hony*, of old *Lome*, or *Porter*, of good *Bul-*
kadell, boyle them all together, and make a ſtone of them to bee
 ſet in the middeſt of a houſe. *Tragus* teacheth to take the rootes
 of the *Thiſtelle*, and to boyle them with the pickle of *Hearinges*.
Conſtantine out of *Didymus*, writeth of diuers other things for
 this purpoſe, whiche who ſo will, may trye. Looke well that
 they bee not deſtroyed by the *Hauke*, or *Buzard*: the *Hauke* is
 a ſpeciall enemy to this Birde, whoſe taking, *Varro* teacheth
 you in this maner: to lay a *Digion* vppon the grounde, and to
 ſticke, bending cloſely ouer her, a couple of *Lymie* rods. There
 is a kinde of *Hauke*, that naturally is terrible to other *Haukes*,
 and preſerueth the *Digion*: the common people call it *Caſtrell*.
Columella affirmeth, that if you take the young *Caſtrells*, and
 preſerue them euery one in earthen veſſelles well couered and
 plaſtered all ouer, and hang them in the cornets of the Douch-
 houſe, it makes the *Digions* haue ſuche a loue to the houſe, as
 they will neuer forſake it. They haue many other aduerſaries,
Crowes, *Dawes*, and *Dwles*, whiche all deſtroy the *Digions*,
 ſpecially when they breede. I founde of late in myne owne

Cardan

Columella.

The fourth Booke

Douehouse, an Owle sitting solemnely in the Nest vpon her Egges in the middest of all the Hedges, and hard by the house in an olde hollowe tree, I found peeces of young Hedges, that the Owles had brought to feede their young with: and though the Owle seeme to bee greater then the Hedge, by reason of the thicknesse of her feathers, yet will they creepe in at as little a place as the Hedge will: so small and little is their bodies, though they be bombased with Feathers. Against Weasels, Stoates, and suche like, *Palladius* would haue you hedge the Douehouse about with sharpe prickly branches voyd of leaues, as Goyle Byers, and suche like, as they dare not passe through for pricking. *Didymus* and others, doo bidde you hang greate branches of Rue all about the house, specially at the entrance of the doore, or to put wilde Rue vnder their winges, or to sprinkle them with Rue: for this hearbe (as they say) hath a speciall force against suche hurtfull vermine. Some say, that if a Woolues head bee hanged in the Douehouse, it will drie away all hurtfull vermine.

*Comedie for
wese.*

Quo.

Phefantes.

MELISSEVS. We haue heard yenough of Hedges, I pray you proceede with suche other Birdes as you keepe in the countrey. Keepe you any Fesantes here?

CHENOBOSCVS. This kinde of Birdes (though they bee very seeldome kept among the countrey people) yet of many curious and fine fellows, for their rarenesse and dayntinesse, they are brought vp, and kept. And because they benefite the keeper, and profite the Husband, (if the soyle and countrey be for them) the olde wyrters haue placed the keeping of them, within the compasse of husbandrie. *Palladius* teacheth, that you must prouide suche as be young and lustie, that were of the last yeeres bringing forth: for the olde ones be neuer fruitfull. One Cocke is sufficient for twoo Hennes: they breede once a yeere, and lay to the number of twentie Egges, beginning in Aprill, and some where in Marche, but they are better to bee brought vp vnder a Henne: so as you set vnder one Henne fifteene Egges, obseruing the tyme of the Moone, and the number of the dayes, as I tolde you before of the Henne. The thirtieth day they come forth: for the firste fifteene dayes muste feede

feede them with Barly floure tenderly sodde, and cooled, vpon
whiche you must sprinkle a little Wine. After, you shall geue
them Wheate, Grasshoppers, and Antes Egges: let them not
come neare the Water for catching the Wippe, whiche if they
chaunce to haue, you shall rubbe their billes with Barlicke stamp-
ped togeather with Tarre. They are fatted in thirtie daies with
Wheate floure, or Barly floure made in Pelletes, the Pellets
must be sprinkled a little with Oyle, and so put into their throa-
tes, you must take heede you put it not vnder their tongues, for
if you doo, you kil them: neither must you geue them any meate,
till you perceyue the first be digested.

PULLARIVS. What say you to Turtle Doves, these Turtles.
are also brought vp and kept in some countreys.

CHENOBOSCVS. *Columella* affirmeth, that Turtles
will neither lay, nor bring forth in the house, nor Partred-
ges: and therefore they vled to take them wilde when they were
full ripe, and to feede and fatten them in little darke roomes like
Pigion holes: the olde ones bee not so good, as neither the Pi-
gion is. In Winter you shall hardly haue them fatte, in Som-
mer they will fatte of them selues, so they may haue plentie
of Wheate and Coyne: the Water must bee verie cleare and
freshe that you geue them. They holde opinion, that the Tur-
tle after hee hath lost his mate, continueth euer after solitarie.
But because there is greater store of Thrushes & Blackbirds,
we care the lesse for keeping of Turtles. Though Thrushes and
Blackbirdes be kept in diuers places: yet as *Plinie* saith, there
is in no place greater company, then is taken in the Winter
tyme in Germanie: that they were vled for greate dainties, ap-
peare by *Horace*.

Thrushes
and Black-
birdes.

*No dayntier dishe then is the Thrush,
Nor sweeter then the Trype.*

They are commonly dressed whole and not drawen, for their in-
ward partes may well bee eaten, so they be newe: their Crops
are commonly full of Juniper Berries, *M. Varro* wyrteth,
that Thrushes were in his tyme at twelue Pence a peece.

P. iij.

Where

The fourth Booke

Where they vse to keepe them, they also put as many as they take wylde among the others, that they brought vp before; by whose company and fellowship, they passe awaye the sorrowe of their prisonment, and fall to their feedyng: for you muste alwayes haue olde fellowes for the purpose, by whose example they may learne both to eate and drinke. They must haue houses warme, as your Pigeons haue, crossed through with small Pearches: for after they haue flowne about, or haue fedde, they desire to rest. The Pearches must bee no higher then a mans heyght, so as you may easely reache them standing vppon youre Feet. The meate must be cast in suche places of the house, as lye not vnder the Pearches, for silyng of it. *Columella*, and *Palladius* wyte, that vnrype Figges beaten and mingled with Wheate flour must be geuen them, that they may eate therof their fill. *Aristotle* maketh many kindes of them, among whiche he also putteth the *Colmons*, that feedeth vpon Grapes. Our Thrushes doo feede for the most parte vppon Juniper berries, whiche their Croys being opened (as I sayed) doo shewe. They vse also in many places to keepe Quayles, whiche is rather a Birde of the earth, then of the ayre, (as *Plinie* sayth) but because they feede vppon Elebor, and venemous seedes, and beside are vexed with the falling sicknesse, many doo marueile (as *Athenaus* writeth) why they bee so greatly esteemed. They say, their young must bee fedde with Ants, and Emets Egges, as the Partryge. It is thought, that hee flyeth ouer into other Countreys in the Winter tyme, as the Crane, and the Storke dooth, following for their guyde the oldest Quaille, called the mother Quaille.

Quayles.

PVLLARIVS. You haue forgotten one noble and goodly Foule, that is vsed to be brought vp in the husbandmans ponds, Lakes, and Rivers, I meane the Swanne.

The Swan.

CHENOBOSCVS. You say trewe: for this Byrde is commonly brought vp in the lowe countreys, and kept in great numbers in Lincolnsyre, a Countrey replenished with Gentlemen of good houses, and good house keepers. And *Athenaus* alledging the authoritie of *Aristotle*, accounteth this Foule to bee very fruitefull, and of great stomacke, so muche, as it is thought

thought they dare geue battayle to the Eagle. They are bredde and kepte (as you well sayd) in Lakes, Riueres, and Fishponds, without any charge at all, and doo greate good in the Riueres by plucking vp the weedes, and other annoyances: for the excellencie of his downe, and dayntinesse of his fleshe, hee is greatlie esteemed. There is one excellent kinde of them, that taketh his name of the good wathe that hee keepeth, and is alwayes cherished and kept in the Ditches of Citties, and Forresles, for his greate faithfulness in geuing warning. They bee kept almost in like manner as Geese are, but that they vse to sitte longer, sitting a whole moneth, or there aboutes: they bring forth seedonie aboue eight, and so manie did my Swannes bring mee, and sometime fise. They make their Nests hard by the water of Dengees, Meedes, and like stufte: their young ones they carry streight into the Riueres. If the Lakes and streames be frozen in Winter, you must house them. This Wyd is counted among suche as liue longest, foreshewing her owne death, as *Plato* and *Martiall* witness, with a sweete and lamentable song. Thus muche concerning my profession I haue tolde, I trust you that bee my frendes, will take it in good part, and now

PIS SINA RIVS I resigne my place to you, to whose turne it is come.

PIS SINA RIVS. It falleth out in good order, that from talking of water Foules, wee should come to entreate of Fishponds, and Fish: although I doo meane to entreate largelyer both of keeping and taking of Fish in my *Halietrycks*, but because the husbands house, both for watering of Cattell, and other vses can not bee without Ponds, and Lakes, and that euery house is not so seated, as it hath errable ground about it, it is lawfull for the Husband to make his best aduantage of his Ponds, and Waters. The Noble menne and Gentlemen of Rome, were wont to buyde about theyr Houses faire Fish ponds, and many tymes satisfied herein their pleasure, with exceeding cost and expences, as *M. Varro* wyrteth, of the sumptuous and costly Fishponds, of *Hortensius*, *Hircius*, and *Laelius*. *M. Cato*, when he had the wardship of *Laculus*, made foure hundred pound of the Fish in his Pond. The same

Of Fishponds

HERE

The fourth Booke

Varro maketh mencion of two sortes of Fishpondes; the one of sweete water, the other salt, the one amongst the common people, where the springes feede them, and of greate profite; the other neare to the Sea, where Neptune dooth peeble them both store of water and Fish: for examples, may serue the Fishpondes of *Hortensius*, whiche rather pleased the eye, then the Purse. The best making of Pondes, is eyther by the Sea, as *Lucullus*, who to let in the Sea into his Ponde, made a passage through the midst of a greate hill, whereby hee thought hym selfe as greate a Lorde of Fish, as Neptune hym selfe: or els to haue them feede from some greate streame or Riuer, that may bring in both water and Fish, whiche by Fludde or Sluse, may let in alwayes freshe water, not suffering the olde to corrupt, but alway refreshing it, and bringing more Fish. The next in goodnesse, are those that are fedde with Pipes or secreete passages vnder the ground, and may be let out agayne by Sluse, whiche Sluses must so be made, as when you list, you may let the water into your Beddowes, to make them more fruitefull, as is to be seene in the countreys of the *Smythes*; and *Helnetians*, and in many other places. And therefore the waters (as I said) must be wel enclosed with good Bayes, Bankes, and Wallles, that they may bee able to abyde the rage of the Fludde and the water. The worst and last kinde, is such as are made in Lakes, standing Pooles, and Raine waters. These kind of ponds, though they bee the worst, by reason of their uncleane stinking and corrupt water, yet where there is no better, are to be made account of: for though they be not the holdest for keepynge of Fish, yet they peeble some commoditie, and are most necessary about the House, eyther for watering of Cattell, keeping of Geese and Duckes, and washynge, and other like vses: but if so bee you can make them eyther by the Sea, or neare some greate Riuer, so as the Water may bee let in and out at your pleasure: and when so euer you open the Sluses to let out the water, Be sure that you haue them well grated, that the Fish can by no meanes passe through, and let the passages, if the place will suffer it, bee made on euery side the Pond: for the olde Water will best wynde, when so euer the extreame brends, the

current

Sluses
to water
meddow

the worst

current lye agaynst it. These Slules or Passages, you muste make at the bottome of the Ponds, if the place will so serue, that laying your leuell with the bottome of the Pond, you may disterne the Sea, or Riuer, to lye seuen foote higher: for this Columella thinkes, wil be a sufficient leuell for your Pond, and water penough for your Fish. Nowbeit, there is no doubt, the deeper the water comes from the Sea, the cooler it is, wherein the Fishes most delight. And if so bee the place where you meane to make your Pond lye leuell with the hym of the Sea, or the Riuer, you must digge it nine foote deepe, and lay your Currant within two foote of the toppe, and so order it as the water come in abundantly: for the olde Water lying vnder the leuell of the Sea, will not out agayne, except a greater rage come in: but for the Pond that is subiect to the fludde and the ebbe, it is penough if it bee but two foote deepe. In the bankes and sides of these Ponds, you must haue Bushes and Creeke holes, for the Fish to hide them in from the heate of the Sunne: besides, olde hollowe trees, and rootes of trees, are pleasant and delightfull harbours for Fish. And if you can hauntemely contray them, it is best to byng from the Sea, little Rockes with the Weedes and all vppon them, and to place them in the midst of youre Ponds, and to make a young Sea of them, that the Fish may skarslye knowe of theyr imprisonment. About Turwan in Fraunce, and in other places, you shall finde in Loughes and Rayne Waters, euen, in the wildernes and heathes, greate abundance of Fish. In diuers places of the lowe Countreys, where they haue their Ponds scode with the Riuer, which they may shutte out at their pleasure, they so order them, as they bee either environed, or deuided with deeper Ditches, wherein the Fish doth liue in the Sommer tyme: and the rest of the ground betwixt the Ditches, the water beeyng wyped and kept out by Slules and Bankes, is sowed with Sommer Corne, and after Haruest, the water let in agayne, whereby the ground beeyng wonderously enriched, dooth yeelde greate Cropes of Barlie, and Sommer corne, and (as the Poet saith) for the lande, so may be sayde for the water, Not enery ground for enery seede, but re- garde must bee had, what for euery one meete. The Romanes

keepe

Columella do
thinke 7 foote
water deepe en
for fische

raves, hollowe
rootes of trees
are pleasant har-
bours for fische

The fourth Booke

keepe in their Ponds Lampreyes, Oysters, Lutes, Mullettes, Lampoyns, Gynlheddes, and all other Fische besides, that are vbled to be kept in freshe waters. Ponds for Oysters, were first deuised by *Sergius Orata*, at the Baynes, about the tyme of *L. Crassus* the Oratour, before the Battaille of *Marſie*, not so much for delicacie, but for his commoditie and gayne. Cocles, and Mules, were kept in Ponds by *Fulvius Hirpinus*. Moreover, diuers Fishes delight in diuers places. The best Wykes and Lutes, were thought to be in the Riuer of *Tyber*, betwixt the two Bridges: the *Turbottes*, at *Ranenna*: the Lampreyes in *Sicyll*: so Riuers, Lakes, Pooles, and Seas, in some places haue better Fische, then in others. Whereto to returne to my fishponds from whence I came, neyther may all sortes of Fishes bee kepte in euery one, for some sortes are *Grauellers*, delighting onely in Grauellie, Stonie, and Sandie Waters, as *Menowes*, *Gudgins*, *Bulheddes*, *Ruffes*, *Trowtes*, *Perches*, *Lampoyns*, *Crewilles*, *Barbells*, and *Cherries*. Others delight againe in Muddie places, seeking euer to lye hyd in the Muddie, as the *Tench*, the *Ele*, the *Bream*, the *Carpe*, and such others. Some againe delight in both, as the Wyke, the Lute, the *Carpe*, the *Bream*, the *Blake*, and the *Roach*. The Grauellie Fishes, specially the *Menowes*, are ingendred of Sheepe's dounge, layed in small Baskettes in the bottome of a Grauellie Riuer. The Lute, or Wyke, groweth (as likewise dooth the *Carpe*) to bee great in a short tyme, as in thre or foure yeres, and therefore in suche Ponds as haue neyther the Sea, nor Riuer commyng to them, wee vse euerie fourth, or thirde yere, to drawe the olde, and to store them with young. And in these parts we chesefely store them with *Carpe*, hauyng small Ponds, and Stewes for the purpose to keepe them in, so as you may come by them at your pleasure. Thus muche I thought good to declare vnto you touchyng my profession, let vs now see what you (*MELISSEVS*) can saye for your Bees, and your Pony.

Bees.

MELISSEVS. Because I wyll not haue our discourse of husbandry depriued and mapmed of suche a profitable member, whose vse may in all places, be they neuer so desart, or barren,

ren bee had, I thinke it good as a conclusion to the whole, to shewe you for my part, the manner of keeping and orderyng of Bees: for the good husband by cherishyng of them, picketh out manie tymes a good yeere of his liuyng, yea the poore soule of the Countrey that hath no ground to occupie, may rayse hercof, and that without charges a great commoditie. *Merula* reports, that *Varro* had perely for the Rent of his Bees, a thousand gallons of Hony: and that in a house in Spayne, hauyng not passing one Aker of ground to it, hath yeerely beene made of the Bees, foure score poundes woorth of Ware and Hony. This little poore creature the Bee, dooth not onely with her labour yeelde vnto vs her delicate and moste healthy Hony, but also with the good example of their painefull diligence and trauaile, encourageth man to labour and take paines, accordyng to his calling: in suche sorte, as it seemeth the almighty and moste excellent maiestie, hath of all other specially created this little poore creature, for the benefite and commoditie of man: by whom, besides the commoditie of the Hony and Ware that they maie, wee might both take example to spend our life in vertuous and commendable exercises, and also to honour and reuerence the wonderfull bountie and goodnes of the most gracious LORD shewed towardes vs, in the creation of this small and profitable Worme. They are continually busied in labouring, they shewe great cunning and workmanship in their trauayles, they haue alwayes amongst them the liuely Image of a perfite common wealth, they yeelde obedience to their Prince, not liking the gouernment of sundry heads, but loue to bee ruled by one: each one of them laboureth and trauayleth in his charge, in so much, as the wyldest Gouernours and Councellours in Commonweales, haue taken the Bees for their Patterne in choosing of Princes, distributyng of Offices, rewarding of vertues, and punishing malefactours. *Varro* did alwayes call them the birdes of the Muses, and *Virgill* with woonderfull colours, dooth frequently set forth the Bees, their Common weale, Pallaces, buyldinges, Citties, lawes, manners, warres, and trauayles, supposing them to bee partakers of reason, and that they haue some instinct from aboue, in that they so neare resemble the

Industrie of
Bees.

Bees, theyr
common-
weales

The birdes
of the Muses.

minde

The fourth Booke

minde of men, yea many tymes excell them, touchyng their obedience to their Prince.

Virgil.

Not Egypt in his prime, nor Lydia large and wyde,
Ne yet the Parthian people great, nor all the Medes beside.
Doo so their King obey, who being safe and well,
Their mindes are all together one, he onely beares the bell.
On him they cast theyr eyes, and gard him day and night,
And oft they beare him on theyr backs, in his defence they fight.
But if he chaunce to dye, then all is dast and donne.
Their Coames asunder downe they teare, and all to ruine runne.

If the King be taken, the whole Swarme is had: if he be gone,
they disperse them selues abroad, for they can not liue without a
King, hating as well the heblelfe gouernment, as the subiectiō
to many heads. If the King, or (as we terme hym) the maister
Bee dye, the whole Swarme droupeth and mourneth, they
straightwayes cease from gathering of Honey, they sturre not
abroad, but onely with a heauy and sorowfull humming, they
swarme and cluster together about his body. The nature sure-
ly of this pooze creature is greatly to be wondred at.

Virgil.

They only of their broode haue common care.
And neyghbour like their houses nearely stand;
And ruled are by lawes that none doo spare,
Alone they knowe their home and natue land.
And mindfull of the stormy Winter neere,
In Sommer geat, to liue by all the yeere.

Their Princes Pallace is sumptuously buylt, in some seuerall
part of theyr Hyues, beeing mounted aboue the rest, whiche if
you happen to broole, you destroy the broode. They liue all as
it were in a Campe, and duely keepe theyr watche and warde,
working together, and oftentimes sendyng abroad theyr Colo-
nyes: they are warned at their Captaynes appoyntment, as it
were with the sound of a Trumpet, by whiche they knowe both
their times of warres, and truce: they ward all the day tyme at
their

their gates in warlike manner, and haue greate scilence in the night, till one of them in the morning humming out the discharge of the watch: they gette them abroad to their businesse, as the Poete hath eloquently expessed.

*Togeather all they quietly doo lye,
Togeather all they toyl with equall might:
And in the morning soorth togeather flye,
And home as fast they come agayne at night.
Where as they lay their weery lims to rest,
And trimme their wynges, and set their legges in frames
Tyll euery one him selfe hath thoroughly drest,
Then synging at their doores a while they game.
Till one geues warnyng for to goe to bedde,
Then downe they lay to rest theyr sleepeie head.*

Virgil.

For when the sleepeie time of the night comes in, they make lesse and lesse noyse, till one of them goeth about with the like sounde that he gaue in the morning, setting as it were the watche, and geuing them warning to goe to rest: at which time they all suddenly holde their peace. In the morning (as I saide) at the discharge of the watch, they roame straight to the gates, but flye not abroad, except they see the weather will be faire: whereof by nature they haue perfect vnderstanding.

*Nor from the Hines, if likely it be to rayne,
They farre doo stray, nor trust they will the skie:
If that the Southwind blowe, but still remaine.
At home, or busied be with waters nie.
Short flytes they make, and when such stormes they see.
They beare about the smalest stores they finde:
And as the Botes in fluddes that balast be,
So with the same they counterpayse the winde.*

Bees fore-
shewers of
stormes.

Being loded, they flye with the winde: if any tempest suddenly aryse, they counterpayse themselues with little stones, flying in the winde as neare the ground as may bee: their labour, both

The fourth Booke

both at home, and abroad, is certainly appointed. They labour at the first, within the compasse of threescore paze about the Hyues: and when the flowres there haue been sufficiently wrought, they send abroad their discouerers to finde out more foode. And when they fall all together to their businesse, some wooke the flowers with their feete, others carry water with their mouthes, and droppes in their little fleeces: the young lustie fellows labour abroad, the elder at home. Those that goe abroad, doe with their forelegges lade all their Thighes, whiche nature for the nonce hath made roffe: thus being loaded, Legges, Head, Backe and all, as muche as they may beare, they returne home, where there waighteth commonly three or foure at the doore to vnlode them. Within all this whyle are some laying in order, some building, some making cleane, and some making readie their meate: for they feede not seuerally, for feare of beguilyng one the other. They frame their houses archwise within the Hyues, with two passages, so as they may enter one way, and goe out another. Their Coames that they make are wrought full of holes, whiche holes (as *Karro* sayth) are their Celles, or lodgings, made euery one sixe square, accordyng to the number of their feete: these Celles they doo all fill with Honie, filling euerie one in a day or two. These Coames are fastned to the upper part of the Hyue, and hang a litle vppon the sides, not cleauing to the Hyue, beeing nowe cornered, nowe rounde, accordyng to the fashion of the Hyue, as both *Plinie* reporteth, and I shall hereafter shewe you, when I speake of the framyng of the Coames. The Coames are kept vp from falling, with small pillers and proppes belowe, so buylt as they may goe round about to repayre them. The three first loftes of their Celles beneath, are left emptie for feare of the Hyue: the vppermost are as full as may be. Such as are loyterers and idell vagabonds amongest them, are noted, and punished with death.

The punish-
ment of loy-
terers.

*Some range for foode and ply the feedes abroad,
Some styll at home do labour busily:
And round about with wares the Hyues doo lade,
Which from the gummes they paynfully doo try.*

The

The first foundations for the Coames they make,
 And clammy cleaving Wax they fasten by:
 While others of theyr broode the charge doth take.
 And fosters up the seede that shall supply.
 An other sort dooth worke the Hony pure,
 And fylles the Celles with lyconr that you see:
 And others are appoynted to the doore,
 To looke abroade what weathers is like to bee.
 Or to vnloade suche as haue laboured well,
 Or els to dryue the aronsy Drone away:
 Theyr labour smokes and all of time doth smell.
 The Hony sweete that in theyr coames they lay.

And a little after,

The greate doo guyde the Hyue,
 Make fast theyr Coames and Pallaces contrine.

CHENOBOSCVS. Of the worthines, trauaile, work-
 maunship, and good order of this little creature, you haue suffici-
 ently spoken, it nowe remaines that you declare vnto vs their
 sundrie kindes, their keeping, and their ordering.

MELISSEVS. Aristotle maketh many sortes and kin-
 des of them, whereof hee counteth the Shorte speckled and well
 knitte, to be best: and next to them, the long ones like Wasps:
 the third, the kinde that they call the Cheefe, with a very large
 body: the fourth, the Drone, beeping bigger then all the reste,
 wanting both his sting, and courage to labour: and therefore
 they vse to make at the entrie of their Hyues small Grates,
 wherein the Bee may enter, but not the Drone. And the same
 Aristotle in the Chapter before sayth, that there are two kinds
 of kinges, or maister Bees, the one of a golden colour, whiche is
 counted the best, the other blacke, and more partie coloured: they
 bee twyse as bigge as the other Bees, the Tayles of them as
 long as one and a halfe of the other, they are called of some, the
 mother Bees, as the cheefe breeders, because the young of the
 Drones are bredde without a king, but the other Bees neuer.

The kindes
 of Bees.

The cheefe.

The Drone.

Breeders

Virgil

The fourth Booke

The best sort
of Bees.

Virgil following herein *Aristotle*, dooth most commend the little, long, smoothe, and sayre Bee, and making mention of two sortes of kinges, the worser whereby he shall do no harme.

The shape of
the king.

Destroy (saith he) and let the other line,
Whose golden hewe doth glyster in the eye:
And decked with glyttring skalles sayre shewes doth gene,
Of farre more Grace and farre more Maieſtye.
With lothsome looke the other doth appeere,
And dragling drawes his taylor with beany cheere.

And as there is twoo sortes of kinges, so is there of the other Bees.

Some ongly seeme, and some againe doo shine,
Bedasht with droppes of goldin colour fine.

What to be
considered in
buying of
Bees.

Being mylde and gentle: for the Bee the greater hee is, the woyle hee is, and if he bee angry, and fierce, and round, hee is worst of all. And because (as I sayde before) the best are onely to be medled with, sicke the good and the badde are alike chargeable, and require like tendance, and speciall heede to bee had that you meddle not the badde with the good: for lesse will the encrease of your Home bee, if some of your Swarmes be ill matched. You may store your self with Bees three maner of waies, eyther by bying them, takynge the wyld Swarmes, or making them by art. Such as you bye, let them be of the kinde and shape that I tolde you of, and bee sure before you bye them, that the Swarmes be whole and greate, which you may iudge by looking into the Wyues, or if you can not be suffered so to doo, you may gesse it by other tokens: as if so bee you see great numbers clustyrng at the doore of the Wyue, and if you heare a greate huzzing and hummyng within: or (if they bee all at rest) putting your lippes to the mouth of the Wyue, and blowyng therein, you shall easely perceave by their answering sound, whether their number bee greate or no. In bying of them bestide, you must looke whether they bee sound, or sicke: the signes of their

their being in health (as shall be shewed when I speake of their diseases) is, if their Swarmes be great, them selues sayre, and well coloured, and worke lustely. Againe, a token of their not being well, is if they bee heary, looke lothsomely, and duffellie, except at suche tyme as they labour: for then they waxe leane and roffe, with extreame trauayle. You must make your coniecture likewise by their age, suche as are not aboue a yeere olde, looke faire and smoothe, and shine, as if they were oyled: the olde ones are both in sight and feeling, roffe and rugged, and by reason of age, wrinkled: whiche neuerthelesse for cunning in making their Coames, experience, industrie, and skilfulnesse in the weather, doo farre passe the others. In any wise see that you bye them rather from your next neighbour, then from a strange countrey, or farre of: for they many times perish by change of ayre, or shaking in the carriage. And if you bee driuen to carry, them farre, take heede you neither iogge, nor iumble them: the best way to carry them, is vppon a mans shoulders, and that in the night tyme, suffering them to rest in the daye, and pouring into them suche sweete thinges as they delight in, and keeping them close. It is better remouing them in the spring, then in Winter: for they doo not so well agree with winter. If you carrie them from a good place to a barraine, they will straight waies byd you farewell, and forsake their Hynes. When you haue brought them to the place where you meane they shall stand, if it be day time, you must neither open them, nor place them, till it be night, to the ende they may after the quiet rest of the night, goe cherefully to their wooke the next morning. Be sure to marke them well besides for two or three daies after, whether they goe all out or no: for if they doo, it is a shrewde signe they will away. Sometime, if the place be good, you shall assay to store your selfe with wilde Bees: for although that Bees (as *Plinie* saith) can not be rightly termed either wilde, or tame, yet *Varro* calleth them wild, that breede in wild places, and tame, suche as we keepe at home: and affirmeth the manner of keeping them to be diuers. There is greate store of the wilde sort in *Sarmatia*.

PVLLARIVS. They say, that in *Linonia*, and *Sarmatia*, (from whence is brought hither great store of Ware, and

3.1.

Hony)

Transporting
of Bees.

The taking
of Bees.

The fourth Booke

Hony) the countrey people doo geather it in great abundance in hollo we trees, and desart places.

To finde out
the Bees.

MELISSEVS. The greatest token of Bees, and Hony neare, is where they be in greate numbers about the waters: for if you see the number but small, it is a signe it is no good place for Bees: and if so be you see they come in greate numbers, you may soone learne where their stockes bee in this sorte, as *Columella* and others haue taught. You shall carry with you in a saucer, or suche like thing, some redde colour, or paynting, and standing neare to the springes, or waters there aboutes, as fast as they come, touche them vppon the backes whyle they are a drynking, with some little strawe dipped in the colour: and tar- ry you there, till such time as you see them retorne. If the Bees that you marked doo quickly retorne, it is a token theyr houses be not farre of, if it be long eare they come, it shewes they dwell farther of: wherfore you may iudge by the time. If thei be neare, you may easely finde them, if they be farre of, you shall come to finde them in this sort: take a peece of a Reede, or a Ker, with his knottes and ioyntes, and making a small hole in the syde, powre into it either Hony, or some sweete thing, and lay it by the water: and when you see the Bees haue found it, and ente- red the hole for the saueur of the Hony, stoppe you the hole with your thombe, and let but one goe out at once, whose course you shall followe, as farre as you can see hym: and this shall bying you part of the waye. When you can no longer see hym, let out an other, and followe him, and so an other, one after an other, till you come to the place. Others vse to set some little vessells with Hony by the water: whiche, when some one Bee or other hath happen- d to tast, she geueth straight knowledge to her felowes, where by by their flying in number, they come to finde out their dwellinges. If you finde the swarme to bee in some such hole as you can not come at them, you shal daine them out with smooke; and when they be out, bying them downe with the ringing of a lattin bason, so as they may settle vpon some tree, from whence you may shake them into your Diue. If the swarme be in some hole aboue in the branches, you may sawe of the branch hand- somely, and couering it with a white clothe, place it amongst your

your Hives. If they bee in the bodie of the Tree, then may you softly sawe of the tree aboue the Bees, and after ward, close vnderneath them: and beyng couered as before, carry them home, stopping well the chinkes, and riftes, if there bee any. Hee that seeketh the Bees, must begiune in the mornynge, that hee may haue the hole daye before hym to marke their labouring. Thus farre of the kindes of Bees, and getting of them: nowe will I shewe you of the platyng of them, ordyng, and keeping of them. The place for your Bees and your Hynes must be so chosen, as they may stand quietly, and secrete, standing speciallie in suche place, as they may haue the Summe in winter, and in the spring time alway at the rising, and suche as is neyther to hotte, nor to cold: for the excesse of eyther, doth hurt them) but rather temperate, that both in Sommer and Winter, they may haue moderate warmth, and holosome ayre, being farre remoued from the companie of either man, or beast.

Standing for
Bees.

*Where neither wind may come, whose blastes forbyds
Them bringing home their loades, nor Sheepe, nor wanton Kids.
To spring among the flowers, nor wardring best,
Shake of the dewe, and trampling spoyle the rest.*

For they most of all delight in quietnesse: beware beside, that there bee no hurtfull creatures neare them, as the Cowe, that with his breath doth both poyson the Bee, and also draweth them to him: the Woodpecker, the Swallowe, the Sparro, the Storke, Spaydars, Harnettes, Butterflies, Serpents, and Mothes.

What ver-
mine anny-
eth the Bees.

*Drye from thy Hynes the hurt full Lysart greene,
Keepe Throstells, Hennes, and other byrdes vntrewe:
And Progne, on whose brest as yet is seene,
The bloody marke of hands that Itys slewe.
All these destroy thy Bees, and to their nestes doo beare,
Such as they take in flig, to make their young once cheare.*

Of suche thinges as hurt your Bees, I wyll hereafter speake more, where I shall shewe you of their diseases and harmes: in

3.ij.

the

The fourth Booke

The valley
better for the
Bee, then the
hill.

the meane tyme I will goe forward with the placing of them. The place where they should stand, would rather be in the valley, then verie hie: but so, as the rebound of no *Ecco doo* hurte them, whiche sound is verie noysome vnto them: so shall they flee with more ease and speede to the higher places, and come laden downe againe with lesse trauayle. If the seate of the house wyll so suffer, it is good to haue your Bees stande neare your house, and to be enclosed with a Hedge, or a pale: but on such side as they be not annoyed with the sent of Smoke, Wynde, or downy-hill. The best standing, is within the sight of the Haister, by whose presence they are safest kept. For their better safetie (yf you feare them) you may sette them a yarde or more from the ground, enclosing them with little Grates left open against euerie Wynde, or so lettyled with stone, as the Bee may easely come out and in, and scape both Birdes and Water: or if you list, you may make a little house by for the keeper, wherein you may lay your Hives for your swarmes, and other necessities meete for your Bees, setting neare to the Hives some shadowing Trees for them to swarme vpon, according to the Poets aduise.

*And plant the Date tree neare, or pleasant Olyue tree (be:
That with their floury branches sweete, shy Hives may shadowed
That when the captaines young, leade out their lusty swarmes,
The pleasant shade may them allure, to shun the greater harmes.
Not needing for their ease, in places farre to roame,
When as they may more safely sit, and better speede at home.*

Fayre water
necessary for
Bees.

If it may be, let them haue some fayre spring neare them, or els some water coueyped in pipe: for without water they can neyther make Honey, Waxe, nor breede by their young: and therefore saith the Poete.

*Haue fountaynes sweete at hand, or mossy waters greene,
Or pleasant brooke that passing through, the Meades is sweetely
(Scene.*

And straightwayes after.

*If eyther standyng pools be neisher to them wy,
Or running streame with hasty course, their dwellings passeth by,
Cast bowes of Wyllowe crosse, and mighty stones withall,
That may preserue the faynting Bee, that in the fludde doth fall.*

Rounde

Round about the Beepard, and neare to the Hives, set hearbes, plantes, and flowres, both for their health, and profite: specially such as are of the sweetest and delicatest sauour: as *Cuthysus*, *Thymus*, *Cassia*, *Rosemary*, *Sauery*, *Smallage*, *Violettes*, *Sage*, *Laurender*, *Myrthe*, *wilde Marierum*, *wilde Thyme*, *Balme*, *sweete Marierum*, *Saffron*, *Beanes*, *Mustardseede*, *Pouppay*, *Pellitor*, and *Roses*. And if there lye Ground neare it for the purpose, sow it with *Rapeseede*, and *Beechwheate*: for they wonderfully delight in the flowres herof, *Plinie* writeth, that Bees delight greatly to haue *Broom* flowres neare them: of trees, they most delight in these, *The Pine*, *the Myl-lowe*, *the Pyre tree*, *the Almond*, *the Peach*, *the Pear tree*, and *the Apple*, and suche as the flowres thereof be not bitter. Of the wild sortes, the *Cerebinth*, the *Lentise*, the *Lynndtree*, the *Cedar*, and the *Passholme*. The best *Hony* (as *Palladius* saith) is made of *Tym* the next, of *wylde Tym* the thirde, of *Rosemary*. You must remooue from your trees, *Dew tree*, *the Bar*, and *the Cornell*: *Plinie* would also haue the *Olyue* away. Banishe also all the kindes of *Sporge*: for with that, as also with the flowres of the *Cornell*, they fall into a *Flire* and dye. Besides, you must suffer no *Moorme* wood, nor *wilde Concomber* to growe neare them: for they both destroy the Bees, and spoyle the *Hony*. And because the flowre, or fruite of *Elmes* dooth specially hurt them, therefore in such partes of *Italy* where plantie of *Elmes* growe, the Bees doe not long continue. Touching your *Hives*, they are made of diuers fashions, according to the manner of the Countrey. Some are made rounde, some square, some three foote in height, and one in bredth, made verie narrow toward the top, least the Bees should ouerlabour them selues in filling of them. Some make their *Hives* of *Lantern* home, or *Glasse*, to the end (as *Plinie* saith) that they may diuine the manner of their *woofing*. *Narro* maketh mention of earthen *Hives* well plastered within and without with good *Ore* during, so as the roffenesse and ruggednesse can not displease them: but for all that, the earthen *Hives* be the worst that shap bee, because in Sommer they be too hotte, and in Winter too colde. The best *Hives*, are those that are made of *Coke* wicker, or *ryndes* of trees, because they keepe out both colde and heate: the next

Hearbes that
Bees delight
in.

Hearbes they
come to
Bees.

Of the
Hives.

The fourth Booke

are suche as are made of Strauwe and Bentes matted togea-
ther, two foote in bredth, and so muche, or more, according to the
number of your Bees in height. In some places thei make them
of one peece of Woodde, cut and hollowed for the nonce, or of
iopned boordes, five or six foote in height, and these neither are
to hotte in Sommer, nor to cold in Winter. Of these wooden
Hives, the best are those that are made of Figge tree, Pine,
Athe, and Laburte, of suche length (as I tolde you) and a
cubit in breadth. Besides, they wold be covered with riched
Lime, or Ore doing: for so (saith *Florentine*) you shall keepe
them long without rotting. You must also boare them through
slopewyle, whereby the winde gently entering, may dyv up all
Cobwebbes, or suche like novances. You must alwayes have
good store of Hives lying by you, that may be remoued and ea-
sely carryed where you list: for the fixed, or standing Hives, bee
discommodious, as whiche you can neither sell, nor remoue:
though *Celsus* seeme to commend the standing Hives, because
they are neyther subiect to stealing nor burning, being made of
Bricke, or Loame. Your Hives (as *Columbella* out of *Celsus*
dooth teache) must stand upon some table of stone, a yarde from
the ground, and so muche in bredth, so smothered and plastered,
as neyther Toade, Cuerte, or Snake may creepe by: and in
suche order they must be placed, as there may be betwixt every
one a little wal, or partition, being open both before and behind.
If you haue no suche partitions, then place them so, as they be a
prettie way distant one from the other, that in dressing and loo-
king to any one of them, you shake not; nor hurt the other:
for a little iumbling dooth loone marre all their houses, and ma-
ny tymes spoyle the Bees. It is yentough to haue three ranks
of them; one aboue the other: for the keeper shall haue y enough
to doo; to quen looke the uppermost. The part where the Bee
doth enter, muste stand a little lower then the house part, so as
the raine can not run in, and the water (if there be any) may ea-
sely boyde. And because colde dooth more annoy the Bees, then
heate, you must arme your Hives with belinde; against the
hurt and bitterness of the North wind, and let the Sunne come
bountifully to them in the front. And therefore it is best for
you to make the holes where they come in and out; as small as

How you
must place
your Hives.

the mouth of ye
hive must stand
lower then the
hynder part.

you

you may, that they suffice onely for the bignesse of the Bee, partly for auoyding of cold, and partly to keepe out Curts, Beetels, Butterflies, Battes, Mothes, and suche other hurtfull vermine, that would otherwise destroy the Coames: wherefore it is good you haue twoo or thre suche small holes together in every Hone, for the commoditie of the Bee, and restraint of the enemye.

PYLLARIVS. Well, I pray you let vs know when the Bee beginneth to labour, and when he ceaseth.

MELISSEVS. Because I haue declared vnto you before their toyle, their diligence, and order of their trauayle, I will nowe likewise shewe you what time they begin to labour. In the winter time, from the setting of the seuen starres, till the beginning of the spring, they keepe their houses, and come not abroade, by reason of the cold: in the spring, they come straight abroade, and from that time forwarde (if the wether let them not) they neuer rest day. First of all, they frame their Coames, and Wax, that is, they make their houses and chambers, whereof they make so many, as they thinke them selues able to fill: then fall they to breeding, and last of all, to making of Hony. Their Wax, they make of the flowres of trees and plantes: their Hony, of the gummies and clamminesse of trees that are glewy, as Willowe, Elmes, Reede, Iuyce, Gumme, and Rozen: Aristotle sayth, they make their Coames, of flowres, their Wax, of Gummes, and their Hony, of the dewe of the ayre, that falleth cheefely at the rising of the starres, and that there is no Hony made before the rising of the seuen starres, and their Coames of flowres, and that the Bees doo not of them selues make the Hony, but onely gather the honied dewe that falleth, because the keepers finde the Celles to bee filled in some one, or two dayes: and that the Hony being taken away in the ende of Sommer, the Wyues are not found to bee furnished agayne: though there be flowres yenough at that time. This, and much more hereof (saith Aristotle) whom Plinie following him, affirmeth Hony to be made of the ayre, most of all, at the rising of the starres, cheefely the Dogge shining out early in the morning: therefore you shall find in the morning betimes, the leaues of the trees bedewed with Hony, as you shall likewise haue the

When the Bee resteth. The beginning and order of his trauayle.

The fourth Booke

Manna.

The best Honny of Tyme.

Bees, theyr winter food.

Going away of Bees, and the tokens thereof.

Apparayle, Beare, and Beardes, of suche as haue beene early abroad. In the morning, our common people call it Manna, or Honey dew, cleaving to the leaues before the rising of the sunne as it were snowe, or rather candied Sugar. Whether it bee the sweate or excrement of the heauens, or a certayne spittell of the starres, or a iuyce that the ayre purgeth from him selfe, how soeuer it be, I would to G D D it were suche as it first came from aboue, and not corrupted with the vapours and dampes of the earth. Besides, beeing sucked vp from the leaues by the Bees, and digested in their Hawes (for they caste it by at theyr mouthes) and also distempered with the sent of the flowres, ill seasoned in the Hyues, and so often altered and transfourmed, losing muche of his heauenly Vertue, hath yet a pleasant and a speciall celestially sweetenesse in it. The beste Honey is of Time (as I haue sayde before) and good likewise of *Cibisus*, of the Figge tree verie pleasant: *Varro* saith, they take not their sustenance, and their Honie both from one. A greate parte of their foode is water, whiche must not bee farre from them, and must be verie cleane: whiche is greatly to purpose in making of good Honie. And when euerie season suffereth them not to be abroad, they must at suche times bee fedde, least they should then be forced to liue all vpon the Honie, or to leaue the Hyues empty. Some gaue vnto them, water and Honie sodden together in little vessells, putting into it Purple wooll, through the whiche they sucke it, for feare of drinking to muche, or drowning them selues: others, drie Figges, either stamped by them selues, or mingled with water, or the drosse of Grapes, or Reasons mingled with sweete Wine, and tollies made therewith, or with Honey: yea I haue seene some vse (but in my fancie without reason) to geue them Bay salt. Moreover, as the Bees require greate looking to continually, and their Hives daily attendance, so most of all they craue diligent regard, when they are about to swarm, whereinto if you haue not a greate good eye, they will bidde you farewell, and seeke a newe Haister. For suche is the nature of Bees, that with euerie Prince, is bredde a common wealth, whiche as soone as they are able to trauaile, doo as it were disdayne the gouernment and fellowshippe of the olde Bee, whiche most happeneth when the swarmes be greate and lusty, and that

the

the old Stagers are disposed to sende abroade their Colonies, and therefore you shall by two tokens specially knowe, when the newe Hives with their people will abroade. The firste, when as a day or two before they cluster and hang (specially in the evening) about the mouth of the Hive, and seeme to shewe by their commyng out, a greate desire to bee gone, and to haue a kingdome and countrey by them selues: whiche, if you prepare them at home, they content them selues verie well with it. And if the Keeper provide not for them, taking them selues to bee greatlie iniured, they depart, and seeke a newe dwelling. To preuent this mischiefe, *Columella* willes you to looke diligently to them in the Spring time about eight of the clocke, or at noone: after whiche houres, they commonly goe not away, and to marke wel their going out, and comming in. The other signe is, that when they are ready to flye, or going, they make a great humming and noyse, as souldiers redie to remoue their campe. At their first comming out, they lye aloft playng by and doune, as it were tarryng for their fellows, till all their companie come. Yea, many times the olde inhabitantes, beeing weerie of their dwellinges, doo leaue their Hives, whiche is perceiued when they come so out, as none remaine behind, and presently mount into the ayre, then must you fall to ringing of Haines and balons, to feare, or hyng doune the runnawayes, who being amased with the greate and suddaine noyse, doo either presently repaire to their olde Hive, or els knitte them selues in swarme vpon the branche of some tree neare to the place: then must the keeper out of hand bee ready with a newe Hive prepared for the purpose, and rubbed with suche hearbes, as the Bee delightes in, or sprinkled with little droppes of Hony (I haue seene in some places vsed Creame) and so shaking them into the Hive, and couering them with a sheete: let hym leaue them tyll the morning, and then set them in their place. He must (as I tolde you before) haue diuers newe Hives in a redinesse to serue the turne withall. And if so bee you haue no Trees nor bushes growng neare the Hives, you must thrust into the ground certaine bowes and branches for the purpose, whereupon they may knit and settle them selues, and rubbe ouer the bowes with Balme, or suche pleasant hearbes, that when they

(as

The fourth Booke

Bees delight
in newe
Hives.

Signes of
suddain de-
parting, and
the remedies.

(as I say) knitte and settle, putting vnder the Hieve, and com-
passing them with some little smoake, you may cause them to
fall into a newe countrey: for they will rather goe into a newe
Hive, then into an olde yea, if you offer them the Hieve that they
came from, they will forsake it for a newe. Some of them wil so-
denly leave the Hieve without any carrying, which the keeper may
perceave, if he be to lay his eare in the night time to the Hives:
for about three dayes before they goe, they make a great noise,
like souldiers ready to raise their campe: whiche Virgil noteth.

Their mindes are easely knowne for such as stray,

The brasse found commandes to come away.

When through them all a warning voyce is sent.

That doth the warlike Trumpet represent.

And therefore when suche noise is heard, they must be verie wel
watched, whether they come out to fight, or to flee, the keeper
must be at hand: their fightes, whither it be among them selues,
or one Hieve with an other, are easely stickled.

A little dust cast vp on hye,

Doth ende the quarrell presently.

Or Honied water, sweete Wine, broth of Reasons, or any plea-
sant licour, wherein they delight, cast and sprinkled amongst
them, doth straight wayes part them. The selfe same remedies
makes twoo Princes of them, being fallen out, to bee quicklie
good frendes againe: for when there happeneth many tymes to
be in one Hieve sundrie Kinges, by whole dissention the whole
number of the subiectes in the princes quarells, goe together
by the eares, you must by all meanes seeke to remedy it, least by
ciuell dissention, the poore people be destroyed. And therefore, if
you perceave them often to fight, your best is to kill the heddest
of the dissention, and to appease the furie of the fighters, by those
meanes that I told you before. And when the Harciall swarme
is settled vpon some branch of a tree, looke if they hang al togea-
ther like a cluster of Grapes, whiche is a signe, that there is ey-
ther but one king, or if there be moe, they bee agreed: and then
you shall not trouble them, but take them into the Hieve, but if so
be they hang in two or three clusters, like the pappes, or udders
of a beast, it is a signe there are diuers maister Bees that agree
not together: for which you shall search, where you see the Bees

to

Diuers kings
in one Hieve.

to cluster most. Therefore annoynting your handes with the iuyce of Balme, or Beewort, that they may abide you, thrust in your fingers softly amongst them, & shedding the Bees, searche well, till you haue found the ringleader of the dissention, whom you must take away. What the proportion and shape of the king is, I haue told you a little before, that is, something longer then the other Bees, and lesser wingged, of a faire & glistering colour, smooth, & without sting. Now best, some of them be shagheared, and ill coloured, which are thought, & to be killed. *Let the best (as he sayth) weare the Crowne,* who must him selfe also be depriued of his winges, if he be to busie headed, & will alwayes be carrying his people abroade. So shall you with the losse of his sailes, keepe him at home spite of his teeth, while hee dare not for want of his winges venture out of the doores, and so shall he keepe his people at home. *Dydymus wytteth,* that your Bees will neuer gne away, if you rubbe the mouth of your Hive with the doing of a newe calued Calfe. To the same end serueth it, if you stamp the leaues of wild Olives, and Garden Olives together, and annoynt the Hives in the evening therewithall, or if you washe the Hives and the walles with saony lodden in water. When an olde stocke is come to a small number, and that there bee not Bees yenough to furnish the Hive, you must supply the want with a newe swarme, destroying the king of the firste swarme in the spring, so shall both the swarmes dwell together in amitie with their olde Parents, as shall bee shewed you hereafter, where I meane to speake of multiplying the stocke. The summer bringeth past, ensueth the time for taking of Hony: to which I haue next, the trauaile of the whole reuereth. The time for gathering thereof. *Columella* teacheth to see then, when mee perseauie the Drones to be driven out and punished by the Bees: for thence they *Dryne the drouse Drones away.* This Drone is an untime-ly birth, & an imperfect Bee, but born like unto the Bee, save that he is bigger bodied, lying alwayes idle in the Hive, not labouring hym selfe, but feeding like a glubber, of the sweat of his fellowes, yet serueth hee for the looening and bringing up of the young, whiche when he hath done, they thrust hym out of the Hive. *Horre* assigneth thre seasons for taking out the Drones: the first, at the rising of the seven starres, the second, in sommer, the

The shape of the king.

To keepe the king at home

Gelding, or driving the Hives.

The Drone.

Time for taking the Coames.

thirde,

The fourth Booke

third, at the setting of the seven starres: this signe is when the
 Vines be heauie, and that they bee double furnished. You may
 make your conjecture by the Bees, when they make great noise
 within, and when you see them stande dauncing and plaiing at
 their doores, as also if looking into the Hiuie, you perceiue the
 mouthes of the Coames to be couered with a Hony filme. *Dydi-*
mus thinketh it to be the best time for the first haruest, the rising
 of the seven starres, or the beginning of May: the second, the be-
 ginning of *Autumne*: the third, the setting of the seven starres,
 whiche is about October. Howbeit, these times be not alwayes
 precisely to be obserued, but according to the forwardnesse of the
 season: for if so bee you take the Hony before their Coames bee
 reable, they take it ill, and presently leaue woorking. The time
 for getting, or drining your Bees, is early in the morning, when
 you must not at nioie trouble your Hiuies. For this kinde of get-
 ting of your Hiuies, you muste haue two instrumentes for the
 monce, a foote and a halfe long, and more: the one of them muste
 bee a long knife of a good breadth, hauing at the ende a bending
 crooke to scrape withall; the other must bee plaine, and verie
 sharpe, that with the one you may cut the Coames, and with
 the other scrape them, and drine out what Beuer Dregges or
 filth you finde in them. And if your Hiuies bee not open behinde,
 you shall make a smioake with *Gillanum*, or brye doing, beyng
 put into an earthen panne made for the purpose, small at the one
 end, from whence the smioake shall come, and broad at the other,
 from whiche you shall blowe up the smoke from the fire, in such
 sort, as *Columella* sheweth you. This pot you must suffer at the
 first, to smoke into the Hiuie, and afterwards round about with-
 out, and so shall you drine them. Hee that medleth in this case
 with the Bees, must specially keepe him selfe from lechettie, and
 disinke him selfe, and walke him selfe cleane: for they loue to haue
 such as come about them to bee as pure and cleane as may bee.
 They delight in cleannesse, so muche, as they their selues doe
 remove from them all filthynesse, suffering no filche to remaine
 amongst their labours, raking up in heape together the excre-
 ment of their olde bodies, whiche in raynie dayes, when they
 worke not abroad, they remove into yow one of the Hiuie. If
 you see Warlike by their chattering at that come neere them.

Their

Bees hate
 thoeues and
 vncleane per-
 sons.

Their anger is cheefely allwaged by the presence of those that vse to tend them, at whose coming they waxe wilder, beyng well acquainted with those that are their keepers. If there bee two swarmes in one Hive, and agreed together, they haue two sortes & maner of Coames, euery swarme obseruing his owne order, but all the Coames so hang by the roffes of the Hyues and sides, as they touche not the ground where the Bees vse cheefely to walke, as I sayde before in their buylding of their Coames. The fashion of their Coames, is alwayes accordyng to the fashion of their Hyues, sometimes square, sometyme round, sometime long as the Hyues are, in whiche they are fashioned as in a moulde. *Plinie* writeth, that there were Hony Coames found in Germany, of eight foote in length, but howsoeuer they be, you must not take them all out, but must vse discretion in taking of them. Amongst our people in the first, bee haruest (if I may so terme it) they vse with their crooked knife, to pare away no more but the emptie Celles, till they come to those that bee full, taking good heede that they hurte them not: and this they doo in the spring. In the latter Haruest, that is, at the ende of Sommer, they take the Coames full of Hony, in suche sort (as I tolde you) burning the old Bees, and alway keeping and preseruing the young swarmes. In the first taking, when the Heddwes are full of flowres, they leaue the sift part of the Coames behinde: in the latter haruest, when winter approacheth, they leaue a third of the Coames, for the sustenance of the Bee. But this quantitie can not certaynely be prescribed for all Countreys, but must bee measured accordyng to the abundance or want of flowres. *Dionysius Thasens*, thinketh good to leaue them a tenth of theyr Coames in the Sommer tyme, yf the Hyues be very full, other wise, accordyng to the proportion: and if they bee emptie, not to meddle with them. *Plinie* would not haue the Hony of the spring tyme (whiche he calleth flowre Hony) to bee medled withall, but to be spared. Others leaue no Hony at all for them, beecaue of the abundance of flowres that are then springing, whiche is the cheefe foundation of their Coames. Suche as be skilfullest, doo leaue the Bees a twelfth parte of their labour: and this they doo about a thirtie dayes after.

Fashionyng
of the Coa-
mes.

The fourth Booke

after the swarime, whiche they make an ende of commonly in May. The olde and the corrupt Coames, are for the most parte at this tyme taken away, and the sound, and suche as are filled with Honey, left: in taking of the Honey at the latter tyme of the yeere, they vse to destroy the oldest stockes, to saue the charges of feeding of them. This driuing and gelding of Hyues, is not commonly vled in the Countrey, but they rather accordyng to their custome, at the ende of the yeere burne them, alleging for their aucthoritie an olde Englishe pproverbe of their owne. *Dryue Bees, and loose Bees: burne Bees, and haue Bees: and in some places they drowne them.* When you haue thus spoyled your Hyues, you shall carry all your Coames into some handsome place, where you meane to make your Honey, and stoppe vp all the holes and creuisses of the walles and windowes, as close as you may: for the Bees wilbe very busie to recouer the pray. Your Hyues beeyng thus driuen, if there bee any ill placed Coames at the entrie, you shall alter them, and place them in good order, so as the toppes stande downewarde, so when you uert geld them, you shall easlyer take out the olde Coames, and leaue the newe, and the Wax shabe the newer: whiche the older it is, the worse it is. When so euer you take out your Coames, looke that you strayne out the Honey the same daie, whyle they are hotte and newe. The Honey that you take at the full of the Moone (as *Plinie* sayth) peeldeth most, and the fayrer the daye is, the thicker it is. The Coames being taken out, let them rather bee warme then heated, least by ouer heating them, you strayne out the Wax with the Honie: afterward, put them into a good strong bagge, and with a presse, or other Instrument made for the purpose, or with a Wicker baskette, presse out the Honey, but see that before you presse it, you seuer from it suche Coames, as haue in them young Bees, called with some Grubbes, or any redde or rusty moles: for these with their euill iuyce corrupt the Honey. When the Honey is this strayned out, it is put into earthen vessels, and suffered to stand vncouered a fewe dayes till it haue wrought, and cast vp a loft all his Drags, whiche you must often skini of with a little sticke: but in many places they are not so curious, but iumble all together, and so sell

sell it grosse as it is. The best Honey is alwayes in the bottome, as the best Oyle aloft, and the best Wine in the middlest.

CHENOBOSCVS. What countreys yeldes the best Honey, and whiche count you best?

MELISSEVS. The best Honey was in the olde tyme thought to be in *Athens*, and in *Sicily*: it is now thought very good that commeth from *Mosconia*, and the Northeast Regions. The Honey at the beginning is thinne as water, and after the straying, it worketh like newe Wine, and spurgeth: at the twentieth daye, it waxeth thicke, and after wardes, is covered with a thinne rine, or filme, where the frothe of the purging is geathered togeather. The best Honey, & least infected, the Bees doo geather from the leaues of the Oke, the Lindtree, and the Reede. There is thier sortes of Honey, the beste kinde is that whiche is called *Anthim*, or flowre Honey, made in the spring-tyme: the next, is Sommer Honey, or hasty honey, made in thirtie dayes after the tenth of Iune, when the Dogge beignes to come in, the thirde is Heath Honey, a wyld kinde of Honey, and not allowed, being geathered after the first shewers of *Anthim*, whyle the Heath is in floure: and therefore like the Sandie Honey. The best Honey (as *Diophanes* saith) is cleare, yellowish, smooth in touching, and fine, roping, if it bee drawen in length, and long, sticking togeather, clammy, and hard to be got asunder: the Honey that is of the worst making, is to bee boyled. Bread, if it bee dipped in it, doth straight corrupt it, and therefore take heede you put it not where Bread hath beene. The fragments of the Coorne that haue once been pressed, beyng taken out, heated, and strayned agayne, doo make a second Honey, which you muste put by, and keepe by it selfe, for spoyling of the other. Moughtie, & counterfet Honey, is discerned by the burning, for the ill Honey burneth not cleare: as the sayd *Diophanes* witnesseth. The drossie that remaineth, after the pressing, after that you haue diligently washed it in sweete water, must be put in a brasle Caldron, and putting a little water thereto, melted vpon the fyre, whiche when you haue done, you must straine the Wax through a Sieue, or such like thing made of Strawe, or Rushes: and after see the it agayne, and potwyzing it into some vessell with water,

The best Honey.

Three sortes of Honey.

Bread corrupted by Honey.

The Making of Wax.

The fourth Booke

water, from whence you may easily take it, make it vp in cakes, or what fashion you like. *Plinie* wytteth, that the *Comes* muste first bee washed well, and after ward dyed in the darke, for the space of thre dayes, and the fourth daye set vppon the fyre in a newe earthen vessell, so as the *Coames* be couered with water, and then strayued throughe a *Ciue*: last of all, boyled againe in the same vessell, and the same water, and so poured into vessells with cold water, hauing their sides noynted with *Hony*. The *Claxe* will be verie white after it hath stand in the Sunne, and beene twyse sodden: you shall make it blacke with the *Asches* of *Paper*, and being mingled with *Cernisson*, it wilbe redde, and so otherwise coloured as you list.

CHENOBOSCVS. If in the making of your *Hony* your *Bees* bee almost consumed, what wayes haue you to repayre them?

Bees decayed.
The repay-
ring of them.

MELISSEVS. When as an olde stocke is come to bee small, and that you are to furnish out the number, you must destroy (as I sayd) the newe king in the spring tyme, when there is a newe broode in the *Hpyue*, that the newe people without discord, may dwell with their olde *Parentes*. And if so bee the *Coames* haue not peyled a newe broode, you muste take the dwellers of twoo or thre other *Hpyues*, and put them into one, but so (as you remember before) to sprinkle them with some sweete lycour, and so shutte them vp with foode conuenient for them, tyll they bee fully acquainted, leauing but little breathing holes about the *Hpyue*, and keepe them thus enclosed thre dayes. Others doo vse to kill the eldest king, but that *Columella* alloweth not: but if the king be verie olde, (the age of *Bees* shall shortly bee shewed vnto you) and the people alwayes geuen to sedition, then shall you choose a king from the *Hpyues*, that haue moste number of *Kinges*. I tolde you before howe you shoulde make them agree, when you put two swarmes togerather, least they should destroy one an other, that is, to take away the kings of the newe swarmes.

CHENOBOSCVS. What if the whole stocke be decayed by taking the *Hony*, or by sicknesse and diseases, will they breede againe, or may they be repayred by art?

MELISSEVS.

MELISSEVS. By both, though the breedynge and ingendring of Bees, is verie doubtfull with *Aristotle*, neither dare he after his long disputations, affirme any certaintie thereof: sometime hee resisteth the opinions of others, some thinking that thei are ingendred by copulation, the Drone being the male, and the Bee the female: Other saying, that they byng forth young, but doo not ingender, but that they geather their young ones, but from whence, they knowe not. Some Saye, from the flowres of *Maridram*: some, from the flowres of the Reede: others, from the Olive flowres, because when soeuer there is great plentie of Olives, there is also great swarmes of Bees. There are againe that thinke the Drones to bee so geathered, and the Bees to be bredde onely of the kinges: and a little after, he sayth, The young are best bredde, when the Honey is made, they labour with they legges the Wax, and with their mouch they caste out the Honey into the Celles, and hauing layd they young, they sitte vpon them as byrdes doo. The little Worme, or grubbe, beeing thus hatched while he is small, lyeth crumpled vp in the Coame: after ward, spratwleth abroade by his owne force, and falleth to feeding, cleauyng so to the Coame, as hee seemeth to be tyed. The broode of the Bee, and the Drone, is white, of whiche commeth little Wormes, that after growe to Bees, and Drones: thus muche, and more, saith *Aristotle*. In other places he would seeme to gather, that the Bees are ingendred of the kinges, saying that if this were not, there were no reason for suche thinges as are committed in their gouernment, and that the kinges by good reason remaine still in the Hiuie without any trauaile, as onely borne for breeding. Beside, they bee greater, as though their bodies were purposely framed for generation: and they punish the Drones. It is not very likely, that the childe shoud punish the Parentes, therefore the Bees are not ingendred of Drones. Besides, it is a great argument, that Bees are ingendred without copulation, that their broode lyeth very small at the first, wrapped vp in the holes, or celles of their Coames, whereas all other Flies and Wormes, that are bredde by copulation, doo long ingender, and quickly lay, in gretnesse, according to the kind of the Worme. *Plinie*

The fourth Booke

folowynge herein *Aristotle*, affirmeth, that Bees doo sitte as *Henues* doo vpon their Egges: and that whiche is hatched, is at the first a small white worme lying crosse the hole, and cleaving in such sort, as it seemeth to feede. The king is at the first, of a yelowish colour, as a chosen flowre, framed of the finest substance, neither is he bredde a Worme, but with winges at the very first. The other common sort, when they begin to haue fashion, are called *Nymphes*, as the *Drones*, the *Sirens*, and the *Cephens*, whose heades, if any man chaunce to pull of, they serue as a delicate foode to the breeders. After a little time, they powre into them foode, and sitte vpon them (making a greates noyle as it is thought, to procure a heate necessarie for their hatching) till breaking a sunder the filmes that encloseth euery one of them like an Egge, the whole broode cometh forth, *Plinie* addeth, that this was seene and obserued at Rome, in a Hine made of Lanterne hornes: the whole broode is finished in fife and fourtie dayes. As soone as they are brought out, they are taught to trauaile straightwaies with their dammes, the young people wayting presently vpon their young King. There are sundry kinges bredde for sailing, and when they come to age, by common consent, the foulest and vntowardest of them are destroyed. That there is two sortes, and what fashion they be of, I tolde you before.

CHENOBOSCVS. Let vs nowe heare somethynge of their age.

MELISSEVS. Their age (they say) may thus be known. Suche as are not aboue a yere olde, doo shine, and looke as they were newly oyled: the olde ones bee rooffe, shagheard, wrinkled, lothsome, and illfaoured to looke vpon, howbeit, for making of Coames, these are the best. *Aristotle* in his booke before mencioned affirmeth, that Bees lue sixe or seuen yeres, and that if a stocke continue niene or tenne yeres, the keeper of them hath good lucke. *Plinie* wyrteth, that one stocke was neuer seene to continue aboue tenne yeres, not though you supplie the places of the dead euery yere with newe: for commonly in the tenth yere after their first huiuing, the whole stocke dyeth. And therefore to auoyde the mischief of beynge utterly de-

stitute,

The age of
Bees.

stitute, it is good to encrease the number of your Hives, with newe swarmes every yere. And if so bee your Bees, through sudden storme, tempest, or cold, lye dead vpon the ground, you must geather them together into a platter, or a brode bason, and lay them in your house toward the South, specially if the weather bee good, after, caste amongst them Ashes of Figge tree wood, being something more hott, then warme, shake them gently vp and downe, so as you touche them not with your handes, and so setting them into the Sunne, they will (as Varro sayth) quicken againe. To whom Columella subscribing, addeth, that suche Bees as you finde dead vnder your Hives, if you lay them vp in a drye place all the Winter, and bring them out into the Sunne in the Spring, when the weather is faire, and sprinkle them with the foresaid Ashes, they will recouer within a fewe houres. They that list, may proue it: I haue not hitherto tryed it. Marcus Varro holdeth opinion, that Bees are ingendred sometime of other Bees, and sometimes of the bodie of a young Bullock putrified, resiting this Epigramme of Archelaud

To reuiue
Bees that be
dead.

Making of
Bees.

Of Steere that strangled is, are children strangely bred,
Of Horse ingendred is the Waspe, and Bees, of Bullocke ded.
The Horses breede the Waspes, the Bullockes breede the Bees.

For a young Dre, or Steere, being strangled, corrupted, and cast into some suche place, where the putrified vapour can not breath out, and store of herbes and flowres agreeing with the nature of the Bees thrust into the body, as Tyme, Cassia, and suche like, wherewith the vapour may bee tempered, you shall hereof quickly haue Bees, even as you may of the body of a Horse likewise ordered, haue Waspes and Hornettes. Virgil hath described both the maners of ingendring of Bees, and the first sort, in these wordes.

This vse, you woonder would, dooth please the Bee,
The Chaynes vnchaste of Venus they detest:
To fyle them selues with filthy lecherie,
They indge vnmeete, nor wylbe so increast.

¶.ij.

But

The fourth Booke

*But from the plantes and pleasant flowres sweete,
They fetch the tender broode, and hence they get:
Both King and Court, and what soeuer meets.
To rayse their walles, and Empire vp to set.*

Bees made of
a Steere.

The other maners, or repairing Bees by art, the same Poete eloquently thus touched.

*But if your Bees doo happen all to dye,
The breeders gone, that should the race renewe:
His lesson learne, whose skilfull cunningg bye,
Made Bees, with blood of Bullockes that he slewe. &c.*

The maner how Bees are ingendred of a Bullocke, Virgil doth largely discourse out of *Mago*, and *Demberitus*. You must frame a little house fouresquare, about tenne cubites in bredth, and as much in heighth, with foure windowes on euery side, one. A young fatte Steere beeing brought hither, his Nose, his Eares, and all other open ventes stopped, and filled with linnen, dipped in Pitche, must bee beaten with numbers of Clubbes to death, so as both the bones and the fleshe, may bee broken without any blood: for of the blood, commeth the Bee. Afterward, the house beeing deepe strawed with Tyme, and the Bullocke laide vppon his backe, the doores and the windowes must bee close shut vp, and so plaistred, as there can no ayre enter. Thre weekes after, the windowes must be opened on euery side, saue where the wind bloweth strongest, and the light and the ayre let in: when in hath been welcooled & refreshed, the windowes must bee shut vp againe, and made as close as before: and beeing opened the eleuenth day after, you shall finde the house full of Bees, and nothing left of the Ore, saue the hornes, the heare, and the bones: they hold opinion besides, that the kinges are ingendred of the braine, and the other Bees, of the body.

PVLLARIVS. I like not so costly comming by Bees.

MELISSEVS. Of the same opinion is *Columella*: I tell you but the order of the olde skilfull fellowes, you may chose whether you will tye it.

CHENOBOSCVS.

CHENOBOSCVS. I had rather you would tell vs what sicknesses and diseases they are subiect to, and howe wee may knowe the sicknesses, and in what sort to helpe them.

MELISSEVS. I will willingly shew you. The signes and tokens of their health, is if they be liuely quicke, and many in number: if their woorkmanship be neatly, and equally wrought: if they goe about their businesse cherefully, and if they looke faire and smooth. Their signes of their not being in health, is if they looke lothsomely, be roffe and heary, except in the time of their labour, when they commonly looke like labourers, or be droulie, or if you see them carrying out of dead carkasses, and following the Corpes, after the manner of mourners, or that you heare no noyse, nor stirring amongst them. These signes when you see, *Columella* wylleth you to giue them meate in little troughees of Reedes, specially Hony sodden, and ground with Galles, or Roses. You must also to heale them, perfume them with *Galbanum*, Reazins, or olde Strigges of Grapes. If the king happen to dye, the common people wayle and mourne with great heauinesse, neither will they make any prouision for their owne sustenance, and therefore if you feede them not, they wyll famishe them selues.

Signes of
sickness in
Bees.

PISSINARIVS. With what diseases are they most vexed?

MELISSEVS. They are many tymes infected with the pestilence, against whiche you haue no other remedy, then to leaue the Hives farre a sinder. Theyr cheefest and earely sickness, is in the beginning of the spring, when the Spurge and the Elme dooe both flowre: for as vpon newe fruites, so at their first coming abroade, entyled with these newe flowres, being almost hungerstaruen with the winter passed, they feede so greedily, as they fall into a Flir, whereof if they bee not quickly remedied, they dye. For Spurge dooth loose the bellies of all other creatures, but the flowres of Elme, bringeth only the Flir to the Bee. And therefore in suche countreys, where there is great plentie of these trees, the Bees continue but a while. *Columella* teacheth you against this disease, to geue them Rosemary sodden with Water and Hony: some againe vse to geue

The diseases
of Bees, and
the remedies.

The fourth Booke

them the skale of man, or Bullocke: as also the graines of the Pomegranate beaten, and sprinkled with Wine, or Rezins, with the like quantitie of Hanna kneded together, and geuen them in sharpe Wine, boyled in an earthen vessel, and powred into little Reedes. *Virgil* describeth an hearbe called *Aumellus*, with a yellowe stalke, and a Purple flowre, the iuyce of whose roote, being sodden in olde Wine, and strained out, is very good to be geuen them. *Columella* out of *Higimus*, teacheth to remedy them in this sort. First, to take out all the rotten and corrupt Coames, and to geue them freshe meate, and after, to perfume them with smoke. It is good also to put to a decayed Wyue, a newe swarme, as I said before. Many tymes, they dye of a disease that they call the great deuouring, which happeneth when they haue made so much Wax, as they thinke they shall be able to fill, and afterwardes, by storme and tempest, many of them be destroyed, so that the remaine suffiseth not to fill the Coames, whereby the emptye partes of the Coames becommeth rotten, and so by little and little infecteth both the Wary, and the Bees. For which the onely remedy is, either to put in a newe swarme to fill vp the celses, or if you haue no such swarnes, to cut away part of the Coames before they come to be nought, whiche you must doo with a very sharpe knife, for feare of displacing the rest of the Coames. A cause beside many tymes of the death of the Bees, is their too much prosperitie, as when there are diuers yeeres greate abundance of flowes, and the Bees so busie in their feedyng, that they forget theyr breedyng, who ouerwearying themselves with trauaile, they dye, not leauing any brood behind them. It is called *Blasphonia*, when eyther by sicknesse, slouthfulnesse, or barrainesse, they leaue no fruite behind them. To remedie this, it is good euery thirde daye, to shutte vp the Wyues close, leauyng but very small holes, out of whiche they can not creepe: so shall they bee forced to looke to their broode, when as they can not otherwise range abroad. Many tymes besides they are the cause of their owne deaths, when perceauyng their Wony to goe awaye, they feede to greedily. Theyr owne Wony dooth also many tymes destroy them: for being touched with it on the backe, they are so limed, as they can not stirre

What hurts
Bees.

and

and Oyle doth not onely kill Bees, but also all other like creatures, *flies* and *Woozmes*. They hate all filchy sauiours, and sting suche as sinell of oymments: they are often besergered with *Waspes*, *Woznettes*, and great *Snattes*: the *Swallows* doth oftentimes spoyle them: the *Woodpecker* doth with his long tongue, thrust into the *Hiue*, lick by their *Hony*, and diuers other *Birdes* (as I haue sayd before) annoy them. The *Toade* bloweth them, and sucketh them vp at their owne doomes, who sustaines no hurt by their stingyng. *Sheepe* are also hurtfull and troublesome to Bees, in whose fleeces, they so tangle their selues, as they can hardly great out. In the waste woods of *Sarmatia*, where they make their *Coames* in the hollowe *Fyre trees*, the *Beare*, for the desire of the *Hony*, climeth vp to them, and robbeth them. Against these *Beares*, the *Beckepers* vse to hang before their *Hiues*, great *Haules* and *Beetles*, whiche the more angerly the *Beare* shoueth aside, with the greater sway they come vppon his head againe, whereby the Bees are well defended. The sauiour of *Cruissies*, if any man boyle them neare to them, dooth kill the Bees: the *Ecco* is also a greate enemy to them, that with her resounding, dooth shake and feare them, and hurtfull to them is also the mist. The *Spyder* is also their deadly foe, and where they can preuaile, make hauocke of the *Hiues*, lettynge their webbes and *Nettes* in euery corner, to ouerthrowe the poore Bee. The night *Butterflye*, that flyeth about the candell, is hurtfull to them two wayes: for they both consume the *Coames*, and of their excrementes leste behind them, is ingendred *Dothes*, in the very wood beside, breedeth a *Woozme* that consumeth the *Wax*. These hurtfull *Uermine*, the carefull keeper muste diligently labour to destroye, and preuent, and looke that he plucke vp all such bushes and plantes, as offendeth them, not suffering any such to growe neare them: and to keepe all hurtfull cattell from them, lettynge them alwayes haue suche thinges at hand, as they most delight in. For the keeper hath woorkenough to turne hym to all the peere long: for after the twelfth of *March*, their *Hiues* must be opened and looked vnto, that all the *Rubbish* and filch of winter, may be swept away, and the *Spyders* that spoyle the *Coames*, plucked out,

To keepe
Bees from
Beares.

Hives pur-
ged in the
spring.

The fourth Booke

Smoke good
for Bees.

and that they may be smoked with smoke made of Dre dounge,
or linnen, (as I spake of before): for smoke is of nature profitable
to the Bees. And though it bee troublesome for the tyme to
them, yet is it certainly very hollesome for them. The Wormes,
besides Mothes, and Butterflies, must be killed, which cleauing
like a pestilence to the Coames, doo fall away if you mingle
with your dounge the Harow of the Dre, and laying it vpon the
Coales, make your smoke: with this order shall your swarmes
bee kept still in health, and shall bee better able to abide their la-
bour: this kinde of purging them must bee often vsed, from the
Calendes of Aprill, till the fall of the Lease. The keeper must
keepe him selfe (as I sayd before) cleane from dronkenesse, le-
cherp, and all vncleane and strong sauering sentes: for they loue
to be purg'd and faithfully looked vnto (as hath been often sayd)
About an eight and fourtie dayes after the entring of the sunne
into *Aries*, they begin to swarme, and at the same time do ma-
ny stockes perish, that haue fewe and diseased Bees. About the
same tyme, are bredde in the uttermost parte of the Coames
a broode of a greate biggnesse: whiche some count to bee the
kinges: others call them Brees, because they course and chase
the Bees, and therfore thinke it good to destroy them. From the
rising of the seuen starres, that is, from the fifth Ides of May,
till the tenth, or the twelfth of Iune, they vse to cast their swar-
mes, at whiche season, they must be carefully looked vnto for go-
ing away: from that tyme, till the rising of the Dogge, or the
comming in of the Dogge dayes, whiche is almost thirtie dayes
(as *Columella* sayth) the haruest is both for Honey, and Corne.
In what sorte the Hives are to bee driuen and gelded, is shewed
before: but at this time, and till the twelfth of September, the
Hives must be opened euery tenth day, and smoked. The Hives
being thus smoked, you must refreshe the Bees, with sprinck-
lyng and castyng into the empty partes of their Hyses, verie
freshe and colde water: and if any thing remaine, not washed a-
way, you must sweepe it of with a Goose wyng. Besides, the
Mothes, if they appeare, must bee sweeped away, and the But-
terflies killed, whiche dwelling in the Hives, are commonly a
bane to the Bees: for they both eate vp the Wax, and with
their

Ocellri.

Tymes for
swarming.

their doing, doo breede a kinde of Moorme that they call *Blue Mothes*. These Butterflies, as *Columella* teacheth, you may when the *Pallow* flowreth (at whiche tyme there is greatest number of them) destroy in this sort. You must haue a vessell of *Brasse* very high and straight, narrow necked and mouthed, in the bottome whereof, you must haue a light, and set it in the euening neare vnto your *Hives*, and you shall see all the Butterflies straightwayes fall to the light, and while they play about the flame, they burne themselves, while they can neyther great vp, by reason of the straightnes, nor shun the fire, by meanes of the brassen walles. Betwixt the risings of the *Dogge*, and of the *Bearward*, whiche are almost fiftie dayes, you must take good heede your *Bees* be not spoyled by *Hornettes*, whiche at that tyme lye in wayte for them, euen at their owne doores. After the rising of the *Bearward*, about the twelfth, or fourteenth of *September*, is the second haruest of your *Hony*: from that tyme, till the setting of the *seuen starres*, whiche is about fourtie dayes, the *Bees* do prouide for their winter stoe, of the flowres of *Heath*, *Tamariske*, and other bushes and shrubbes, of which prouision you must take nothing, least you discourage them, and drive them away: from the setting of the *seuen starres* (whiche is about the entrance of *November*) the beginnyng (if wee may belecue *Plinie*) of winter. The *Bees* liue all the *Winter* long, vpon suche stoe of *Hony*, as they haue layd vp: at this tyme, the *Hives* must bee opened and cleansed of what so euer filche is in them, and diligently ordred, for during the *Winter* tyme, your *Hives* must neyther bee opened nor stirred, and therefore in the ende of the *Summer*, while the weather is yet mild and temperate, your *Hives* beeing made cleane in some sunny daye, see that you thrust vnder them, certaine close couers that may reach to the very bottome of the *Coarnes*, not leauing any voyde space, whereby the *Hive* shall be the warmer. When you haue this doone, close by euery rift and open place with *Clay*, and *Bullockes* doung mingled togeather, dawbyng it all ouer without, leauing onely a little hole to come in and out at. You must arme them also against the cold and tempest, with good couerturs of strawe and bowes. Some vse to put in the *Hives*,
small

To destroy
Butterflies.

No stirring
of Bees in
Winter.

The fourth Booke

Small Byrdes being drawen, whiche with their feathers keepe the Bees warme all the Winter, and wherewith, if they happen to lacke foode, they feede them selues sufficientlie. Yea, it hath been seene they haue so fedde vpon them, as they haue left nothing but the bare bones: howbeit, as long as their Hony suffiseth, they neuer medle with the Birdes. It is very good and necessarie (as I tolde you before) to set them meate in little Troughes of Reedes, to defend themselves against famine. When Winter is past, in the space of fourty dayes, they make an ende of all their Hony, except their keeper deale the more liberally with them. It hath often also been seene, that their Coames being emptye, they haue continued fasting, till the Ides of Februarie, and cleauing to the Coames, as if they were dead, haue yet retayned their life: but least they shoulde loose it altogether, it is good to poure them in some sweete liquors by little Pipes, whereby they may sustaine their liues, till the Swallow with her appearing, promise a welcomer season. After which tyme, when the weather will suffer them, they beginne to serke abroad for them selues: for, after the Summe is in the *Equinoctial*, they neuer rest, but trauaile painefullly euerie day, and gather flowres, and necessaries for their breeding. Besides, because fewe places are so fruitefull, as they peecke flowres both Sommer and Winter: therefore in suche places, where after the Spring and Sommer (at whiche tymes, both Beanes, Rapes, Wyllowes, and other plantes and hearbes, in euery place doo floure) the flowres doo faile, they are carried of diuers (and that in the night, as I tolde you before) into such places, wheras there is good store of late flowering hearbs, as Tyme, wylde Baricrum, and Sauery, wherewith they may be fedde, gather foode at their pleasure, and, as *Columella* writeth, that Bees in the olde tyme, were brought from the feedes of *Achaia*, to the Pastures of *Athens*, and so transported in diuers other places. So may we with vs carry them, from places where the flowres bee consumed in the Spring, to the Sommer flowres, as Clouer, and suche other: and after that, about the ende of the Sommer, to places furnished with Heath, *Tamariske*, and such other late bearing floure. For the auoyding of
this

this incommendence of carryng from place to place, I will shewe you in what sorte I haue ordered my Beepard at home. And because maister Hartbach hath shewed you before in his Garden many good hearbes, and yet not whereto they serue, I will shewe you a fewe plantes that I haue set about my Bees, seruyng both for their commoditie, and the health of my houtholde. I haue chosen of a greate number, suche as bee most necessarie, and of greatest vertue: whose speciall vertues, and woonderfull woorkinges, geuen onely by the moste gracious and bountifull framer of the Worlde, and being as it were sucked and drawen out by the carefull toyle and diligence of the Bee, muste needes adde a greater perfection to their Honey, and chey Mell. I haue firste enclosed the Parde, where my Bees stande, with a Quickset hedge made of Blacke thorne, and Honysocke, the one of them seruyng the Bee with his flowres at the begynnyng of the spring, and the other at the latter ende of sommer. The first, the Blackethorne beareth a pleasant white flowre, so muche the welcomer to the Bee, as it is the very farewell of the Winter: for hee commonly flowreth not till the Winter bee past. These flowres newly geathered and steeped all a night in the best and strongest Wine, and afterwarde distilled in *Balneo Marie*, beyng drunke, helpeth any paine in the sides, as hath been certainly prooued. *Tragus* the Germane confesseth, that with this onely water, he hath cured all manner of paynes about the stomacke, hart, or sides. Wine made of the Sloe, and preserued untill July, or August, when the bloody fluxe most raigneth, is a souerayne medecine against it. The other, the Honysocke, or Woodbine, be ginneth to flowre in Iune, and continueth with a passyng sweete sauour, till the very latter ende of the sommer. The water thereof distilled and drunke, two or thre dayes together at tymes, asswageth the heate of the stomacke; helpeth the Cough, and shortnesse of breath. Ragges of linnen dipped therein, and applied, doo heale any heate of the Eyes, or Luer. Next vnto my Honyes, I haue planted the sweete hearbe *Melissa*, or *Apiastrum*, called in Englishe, Balme, with a square stalk, a leafe like a smoothe Rettle, and a yelowwe flowre, and groweth almost in euery Hedge, an hearbe well knowen to the olde

Blackthorne.

Woodbine.

Balme.

The fourth Booke

olde Women in the Countrey, and greatly desired of the Bee.
 This *Melisse*, or *Baline*, sodden in white Wine, and drunke
 two or three morninges together, purgeth the breast, helpes the
 short winded, comforteth the hart, driueth away the dumpe
 heautnesse, that proceedeth of Melancholy, helpeth the falling
 sicknesse and almost all other diseases: being chopped small,
 and steeped a night in good white wine, and after wardes destil-
 led, is greatly commended, not onely in deliuering women from
 their panges and greefes of the Mother, keeping drunke to the
 quantitie of three or foure Spoonfulls, but also cureth the pai-
 nes of fainting of the heart, called commonly the passion of the
 heart. *Cardamus* greatly commendeth this hearbe, for the com-
 forting and renewing of a decayed memory, and affirmeth,
 that it is a causer of sweete and pleasant sleepes. Next vnto this
 haue I growing that sweete and precious hearbe *Angellica*,
 whose Seedes I first receiued from that vertuous and godly
 Lady, the Lady Goding in Kent, a Gentlewoman that setteth
 her whole felicitie in the feare and seruice of the Almighty: this
 hearbe is in flowre, seede, leefe, stalke, and sauour, so like vnto
 Louage, as thei may hardly be discerned the one from the other,
 the leafe dooth in manner resemble the Figge leafe, sauing that
 it is more jagged, and indented round about. If any man be
 suddainly infected with the pestilence, feauer, immoderate sweat,
 let hym take of the roote of this *Angellica* in powder, halfe a
 dramme, and puttyng to it a dramme of Treacle, mingle them
 together with three or foure spoonfulls of the water destilled
 of the said roote, and after he hath drunke it, let them lie & sweate
 fasting, for the space of three houres at the least: thus dooing, by
 the helpe of God, hee shall escape the daunger: the roote steeped
 in Wineger and smelt vnto, and the same Wineger sometimes
 drunke fasting, doth preserue a man from the pestilence: to bee
 short, the roote and the water thereof, is soueraigne against all in-
 ward diseases, it scowreth away the collections of a Plurisie be-
 gynnynge, helpeth vlcered and corrupted Loonges, and is good
 against the Collicke, Stranguiry, and restraint of Womens
 Mouracions, and for any inward swelling, or inflammation, the
 iuyce thrust into a hollow tooth, abuageth the paine, the water
 dropped

Angellica.

For want of
 Treacle, you
 may take the
 whole dram.

Dropped into the eare, both the like: the said iuyce and water put into the eye, quickeneth the sight, and taketh away the thin skins and rines that couereth the eye. Besides, a most present remedy in all deepe and rotten sores, is the iuyce, the water, or the powder: for it clenseth them, and couereth the bone with good flesh. It was called in the olde time *Panacea*, or *Healeal*. Next vnto this *Angelica*, haue I growing in great plentie, *Cardus Benedictus*, or blessed Thistle, whiche the *Empirickes*, or common *Proalisers*, doo commend for sundry and great Vertues, affirming, that it was first sent out of *India*, to *Fredericke* the Emperour, for the greate Vertue it had against the headache, or megrime, being eaten or drunken. Likewyle they say, it helpeth against the dasing, or giddinesse of the head, maketh a good memory, and restoreth the hearing. For the prooofe of his greate force against popson, they bypnyng forth a young mayden of *Pamby*, that hauing vnwares eaten of a popsoned Apple, and therewithall so swollen, as no Treacle, nor medicine could cure her, was at the laste restored to health, by the distilled water of this Thistle: and likewise that a boy, into whose mouth as he slept in the seelbe, happened an Adder to creepe, was saued by the drinkeing of this water, the Adder creeping out behind, without any hurt to the child. In fine they affirme, that the leaues, iuyce, seede, and water, healeth all kind of popsons, and that the water hath healed a woman, whose Breast was eaten with a canker to the verie Ribbes. I haue also set in this little peece of ground, greate store of the hearbe called *Numularia*, or *Penygrasse*, whiche creepeth close by the ground, hauing vpon a long string little round leaues, standing directly one against the other, and a yelow flowre, like the Crowfoote. It is a soueraine hearbe for healing of woundes, not only outward and greene woundes, but also inward sores and vicers, specially of the Loonges, whereof there hath been good prooofe. *Tragus* affirmeth, that he hath seen dangerous, and desperate woundes cured with this hearbe, being boyled with Hony and Wine, and drunken. It healeth exulcerations of the brest and Loonges, and may be well geuen to those that cough, and are short breathed, and to little children diseased with the dry cough, who by reason of their tender age may take

Cardus Benedictus.

Penygrasse.

The fourth Booke

Scabious.

take no stronger medicine: I haue seene good plenty of it growing by the shadowy Ditches, about great Peckham in Kent. I haue beside there, growing *Scabious*, an hearbe that groweth commonly in Coine, with a jagged leafe, lying round vpon the ground, and thrusting out in sommer a long stalke, with sundry branches, the flowre growing in blew knoppes, or tuftes, like *Honycomes*. This hearbe being sodden with white Wine, and drunke, doth helpe the *Plurisie*, against whiche diseases, the women of the countrey, that many tymes take vpon them to be great *Dodresses* in *Phisicke*, doo still the water thereof in May, and geue it to be drunke at eache time, two or thre sponesfuls, not onely against the *Plurisie*, but against inward imposternes, coughs, and all diseases of the brest. Against imposternes, diuers (as *Tragus* writeth) doo make this composition, they take a handfull of *Scabious*, the hearbe dyed, of *Liquerisse* cut small an ounce, twelue *Figges*, *Fenell* seede an ounce, *Aniseede* as much, *Oras* halfe an ounce, these they lay all a night in water: the next day they boyle them, till a thirde part be consumed, and after making it sweete with *Suger*, or *Hony* of *Roses*, they geue it warme in the morning and the evening, wherewith they say, the imposterne is ripened, made soft, and cought out,

PVLLARIVS. I remember, that passing by the house of that honorable Baron, the *Lorde Cobham* (whose house you shall seeldome see without great resort, by reason of his noble disposition, and honourable intertainment that hee geueth to all committers) I chanced to see in his *Parke* at *Cobham*, a certaine taine herbe called *Veronica*, whereof I haue heard vertues.

Veronica.

MELISSEVS. That can I also shewe you amongst the hearbes that I haue about my Bees: it is called of some *Fencrium*, and *Veronica*, as it is supposed of a certaine French King, who was thought by the iuyce thereof, to be cured of a great *Leprosie*, it is called in english *Fluellin*: in crepech lowe by the ground, as *Penigrasse* doth, and beareth a leafe like the *Blackthorne*, with a blewish speckled flowre, with a seede inclosed in little pouches, like a shepherdes purse, and groweth commonly vnder *Oakes*. *D. Hieron* writeth, that the force thereof, is marueylous against the *Pestilence*, and contagious
ayles,

appes, and that he himselfe hath often tymes proued, The water
 of the hearbe steeped in white Wine, and distilled therewithall,
 he hath cured sundrie times, hotte burning and pestilent feuers,
 as well in young men, as in old. Hieron Transchweyg, commen-
 deth it to bee singuler good for all diseases of the Spleen: the
 shepheardes of Germany, geue it with greate profite made in
 powder and mingled with salt, to their cattell diseased with the
 cough, being steeped in Wine and distilled, it is a most present
 remedie in all Pestilent feuers: being geuen two ounces there-
 of with a little Treacle, and after layed warme in bedde, and
 well couered, it expelleth the popson by sweate, and driueth it
 from the harte. The water of this hearbe taken certaine dayes
 togeather, two ounces at a time, helpeth the turnesicke giddi-
 nesse of the head, voydeth fleame, pourgeth blosd, warmeth the
 stomacke, openeth the stopping of the Liuer, healeth the disea-
 ses of the Loonges, and the Spleen, purgeth the Vaines, the
 Matrice, and the Bladder, it driueth out sweat and venome, hel-
 peth the Gandise, the stone of the Keyngnes, and other 'gree-
 nous diseases. You shall also haue amongst these plantes of
 mine, the good sweete hearbe *Cariphilata*, or of some, *Benedicta*,
 of others, *Sanamanda*, called in Englishe *Aueus*, whose roote Aueus.
 whether it be greene, or olde, resembleth the Cloue in sauour:
 the leafe is iagged, rooffe, of a darkish greene, and not much vn-
 like to *Agrimony*: the flowre is pellow, and after the falling
 thereof, leaueth a prickly knoppe like a Hedgehogge: the roote,
 the longer it hath growen, the sweeter it is: the speciall use of
 this roote in some countreys, is to be put in Wine in the spring
 time: for it maketh the Wine to taste and sauour verie pleasant-
 ly: whiche Wine, as many holde opinion, doth glad the harte, o-
 peneth the obstruction of Liuer, and healeth the stomacke, that is
 ouer burdened with cold and grosse humors: this roote boyled in
 Wine and geuen warme, doth ease the greefe of the stomacke,
 or the belly, proceeding of either colde, or winde. Hard by this
 hearbe, haue I planted the greate water *Betony*, called of some,
Ocimum, of *Mathiols*, *Scrophularia Mayor*: it hath a
 greate square stalk, and bigge leafe indented round about: the
 flowre is in colour Purple, and in fashion lyke the Shell of a
 Snayle:

Nota

The fourth Booke

Snayle, it flowreth in Iune and Iuly, and groweth most by waters in shadowy places. *Tragus* teacheth to make a speciall oymntment thereof, seruing against all Scabbes and Sores, where with he saith, he hath seen people so mangie, as they haue seemed euen Lepers to bee cured: his oymntment is this. Take the hearbe, rootes and all, gathered in May, washed and well cleused from all filth, stampe it, and strayne out the iuyce, and keepe it in a narrowe mouthed Glasse well stopped, wherein you may keepe it a whole yeere, and when so euer you list to make your oymntment, take of the same iuyce, of Wax and Oyle, of eache a like quantitie, and boyle them together vpon a Chafin dish of coles, stirring them well, till they be incorporated, and so vse it. *Mathiolus* teacheth to make a singular oymntment thereof against Kernells, the Kinges euill, and the Venerodes: his order is this. You must gather the rootes in the end of sommer, and after that you haue made them very cleane, stampe them together with freshe Butter, and putting them into an earthen vessell close couered, set them by in some moyst & dampishe place, suffering it there to remaine for the space of fiftene dayes: after wardes, let the same Butter bee melted with a soft fire, and being well strained, lay it by for your vse. There haue

Cardiaca.

I also an other excellent hearbe, called in Latine *Cardiaca*, I knowe no name for it in English, except you will call it *Wotherwort*, and in deede it is the verie true *Wotherwort*: it groweth by high wayes, and neare to stone walles, it hath a leafe something like a *Mettell*, but more indented, the Leaues next to the roote beeing lagged like the *Crowfoote*: it groweth bushyng with many stalkes, I haue seene it plentifully in Surry, and some stoze of it about *Wardstone* in Kent: it is of great force against any sicknesse of the hart, whereof it taketh his name: it helpeth Crampes, & Palseys, it clenseth the brest from fleame, it killeth *Wormes* in the body, openeth cold obstructions, prouoketh Urine, and womens Courses: being made in powder, and a sponesfull of it giuen in Wine, it woonderfully helpeth the hard labours of women.

Betony.

CHENOBOSCVS. I maruaile you haue no stoze of *Betony* also: for I haue seen the Bees labour diligently vpon it,
and

and haue heard, that it is of great vertue.

MELISSEVS. I haue great store in deede of it, but that I forgot to tell you of it, it is knowne so commonly, as I neede not to describe it vnto you: whosoever is troubled with breakyng of wind and weakenesse of stomacke, and those whose stomackes retaine not their meate, or whosoever feelles a sonye belching from his stomacke, and is therewith often troubled, let them continually vse *Betony*, eyther the hearbe and flowre boyled in Wine, or the water distilled, or the Conserue (as they call it) of the flowres. And if so bee you lacke the Conserue, or the water you may vse the dry hearbe in powder, eyther by it selfe, or with Honey: women that are troubled with the mother, may vse this hearbe for their remedie. To be short, the flowre, leafe, and roote of *Betony* sodden and drunke, or howsoever you will, in Electuarie, Conserue, Sirope, Motion, or Powder, as you list to take it, is si guler good in the diseases of the Stomacke, Luer, Spleene, Kidneyes, and Bladder, it freeth the Matrice from obstruction, and draweth from thence all hurtfull moystures. For consumptions of the Loonges, Coughes, Dropfies, continuall and putrified feuars, proceeding from the Stomacke, boyle the leaues and flowres of *Betony* in Honnyed water, and you shal haue present helpe. Thus haue I shewed you what kind of hearbes I haue planted about my Bees, to the ende they shuld haue foode at hand of the sweetest, and the hollosomest: I haue shewed you also the vertues of the hearbe, the flowre, and the water, that you may vse for your owne commoditie: onely this warning I geue you, that you doo not distill them, as the vnl killfull doo, in Stilles of Lead, Tinne, and Brasle, which poisoneth and spoyleth the water, but in Glasle Stilts, set in some besell of water vpon the fyre, whereby your water shalbe most perfect and hollosome. The difference of these two distillirges, appeareth plaine: for example, in Wormewood, which if you distill in your common Syllatories, the water commeth out sweete, haupng gotten a corrupt qualitie by the nature and corruption of the metall: whereas, if you do it in Stilts made of Glasle, looking vnto the Glasses bee well closed round about, your water shall haue the very taste, sauour, and propertie of the hearbe.

vertue of
betonie.

As,

With

The fourth Booke

With these Glasse Stills you may so order your fire, as you may drawe out of euery hearbe, the Water, Spirit, Oyle, and Salt, to the great comfort of sicke and diseased persons. I set be- sides great plentie of Sauery, Heath, Tamariske, and with- out the Beeryard, Broome, in whose flowres the Bee much de- lighteth. I keepe you here peradventure too long in so small a matter.

Small is the thing, yet small is not the gaine:

If gracious gods permytte, and Phoebus not disdaine.

As the heathen Poet wytteth: but I will here make an end of my talke, that hath perhapes been thought too long.

FINIS.

Soli Deo.

Olde English rules, for purchasing Land.

*Who so wilbe wise in purchasing,
Let him consider these poyntes folowing.*

FIRST see that the lande be cleare,
In title of the sellare.

And that it stand in danger,
Of no womans downie.

See whether the tenure be bond or free,
And release of euey feoffee.

See that the seller be of age,
And that it lye not in morgage.

Whether a tayle be thereof found.
And whether it stand in statute bound.

Consider what seruice longeth theretoe,
And what quitrent thereout must goe.

And if it be come of a wedded woman,
Thinke thou then on couerte baron.

And if thou may in any wyse,
Make thy charter with warrantise.

To thee, thine heires, assignes alwaies,
Thus should a wise purchaser do.





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Church-yaerde, at the
great North doore
of Paules.

Anno Domini.

1578.

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